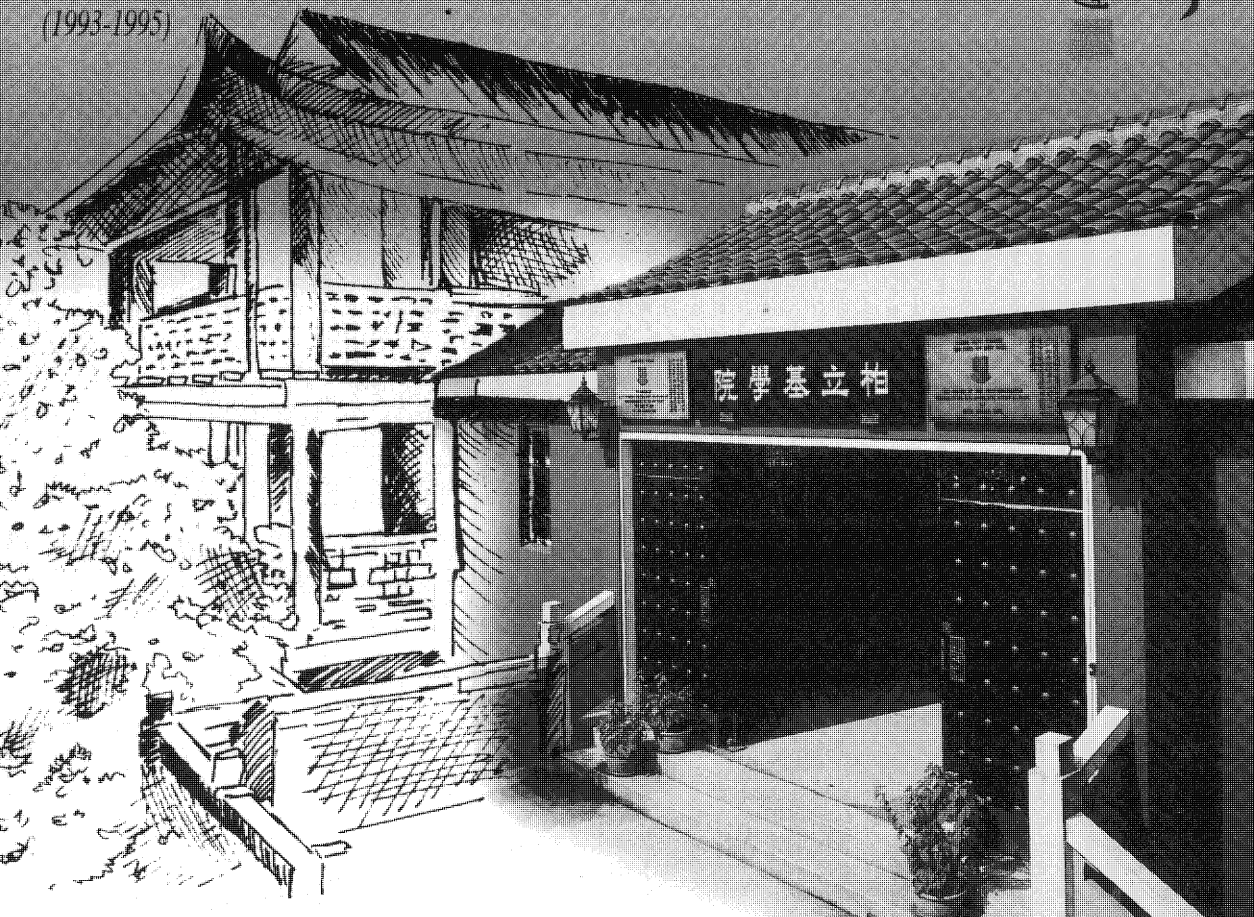
THE EVENINGS OF INSIGHT

Lectures and seminars at
Robert Black College,
The University of Hong Kong
(1993-1995)

香港大學柏立基學院漫步刊

聚賢錄



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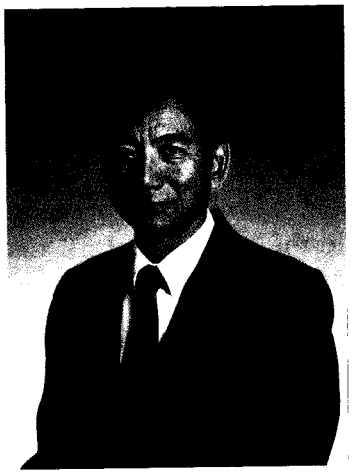
Foreword



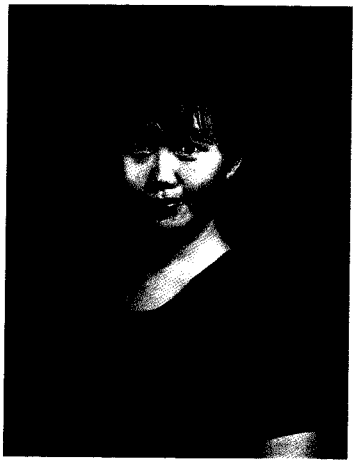
The College has established the tradition of holding Guest Nights from time to time ever since its establishment in 1967. These are social functions which are organised to promote the mutual understanding between overseas and local academics including graduate students and between town and gown. There was often an after-dinner talk given by the Guest of Honours of the evening. The Guest Night with its after-dinner talk became a monthly event during term time and the talk gradually took the form of a short lecture after I took up the Mastership of the College in 1987. Over the years, Guests of Honour and Speakers included the Hong Kong Governor, top officials of the Government, Consulate Generals of various countries, well-known personalities in the local community and distinguished scholars from overseas. Some of the earlier Guest Night talks, which have been gaining popularity with the passage of time, are highlighted in the earlier College Journals.

In the past three years, the College has had the additional responsibility of administrating the residence of some seventy graduate students in its new Wing, formerly known as May Hall. Since the academic year 1993-94, the College has established a second tradition of holding regular College Seminars which are given primarily by the graduate students resident in the College. The topics of both Guest Night Lectures and College Seminars are of a varied nature and are designed for a mixed educated audience. They are always well prepared by the speakers and are always well attended.

In order to keep a record of the work so pains-takingly undertaken by the speakers, I am pleased to announce that from the year 1993 all the abstracts of both the Guest Night Lectures and College Seminars have been collected and edited and those in the two academic years 1993-94 and 1994-95 are in the first instance to be put together in this publication. I would like to take this opportunity to convey my special thanks to Dr. J. H. Liu, Rayson Huang Fellow of the College, Mr. Robin Gauld, Tutor of the College and Professor Patricia Erens, a College Resident, for collecting and polishing the abstracts of the lectures and seminars. Above all, I am heavily indebted to Ms. Eileen K.M. Chan, Swire Studentship Holder of the College, for acting as editor for the publication. It is my fervent hope that this publication will be the first of a series of biannual publications, to be augmented in the future with the abstracts of lectures and seminars given in the College during the academic years: 1995-96 and 1996-97.

Vincent W.S. Leung
Master

Editorial



As a postgraduate student resident in Robert Black College, I have been very much benefited by the lectures and speeches on regular College Guest Nights and Seminar Nights often given by highly distinguished local and overseas personalities. As the editor, it is my great pleasure and privilege to compile the abstracts of all the lectures and speeches for the 2-year period from 1993 to 1995 into the first College journal of its kind.

I am very grateful to the College Manager, Ms. Catherine Lok, the College Fellow, Dr. Liu Jin Hua, and the College Tutor, Mr. Robin Gauld, for collecting the articles. Next, my gratitude goes to Mr. E. H. Brent and Prof. Chin Wan Fung for their contributions to the English and Chinese titles of the journal respectively. I am also very thankful to Prof. Patricia Erens for her invaluable advice on editing techniques and to Mr. Eric Tse, Ms. Siu Ling Lau and Mr. Johnaphen Ma for their help in proof-reading. Finally, my congratulations go to the College Master, Prof. Vincent Leung, for initiating the publication of the journal which is full of remarkable insights of the academic and cultural life in Robert Black College.

Eileen Kim Mui Chan
Editor

Guest Night Speeches (93-94)

Biodiversity: Gaia Theory and Chinese Natural Philosophy

by

Prof. Fu-Shiang Chia

The Hong Kong University of Science and Technology

Biodiversity, a term introduced by Walter G. Rosen in 1986, has caught the imagination of our time, indicating the need for a new concept to deal with the biological problems of our planet. The central theme of biodiversity is to study the puratives and differences of living organisms at the genetic, species, as well as the habitat, level. A bacteria may have 1000 genes, a fungus 2000 genes, a flowering plant 400,000 genes and a mouse or man 100,000 genes. We know that there are about 1.4 million identified species, and at least three times as many which have not been identified. Regarding habitats, there are tropical rain forests, wetland, deep seas, deserts, etc., and each habitat supports a different assemblage of species.

Genetic pluralism can perhaps be better illustrated with the following analogy. There is that banyan tree outside this building on which there are epithytes, bacteria, fungi, insects and birds - a total of perhaps of more than two million individuals. Let us assume that each of these two million individuals has an average of 70,000 genes; each gene equals a word, a phrase or a sentence. We can then say that the banyan tree represents a library of two million books of poetry, short stories, novels and scientific references. The difference is that in this case each book is one of a kind; there is no duplicate. To kill that tree means to burn a library of two million rare books.

For years, human activity has been driving numerous species into extinction (or close to extinction) at a rate of almost one hundred species daily. The extinction rate is more than 1000 times faster than the previous four mass extinctions in the history of our planet. Thus, environmental protection, biological conservation and restoration become the subjects of concern to biodiversity.

Why should we care about biodiversity? Biologists have been trying to provide answers to this question and a long list of reasons, be they utilitarian or ethical, has been compiled.

In 1979, James Lovelock proposed the Gaia theory, which says that our planet is a living body; the atmosphere, the ocean, the soil and the biota are parts of the same giant organism and cannot be separated. He provided a mathematical model showing that the air temperature is regulated by living organisms, and

that the more organisms, the stabler the environment. Although considering Gaia theory as a scientific theory is problematic, its concept renders the question: "Why should I care about other organisms or the environment?" meaningless, because according to Gaia theory, such a question is like asking "Why should I care about my arm or my nose?".

The idea of Gaia theory is consistent with the oldest Chinese natural philosophy of Yi-Tao, which was developed by Fu-Hsi about 6000 years ago. Tao is a term used by many Chinese philosophers, but only Yi-Tao provides a clear definition. It says that Tao is the interaction of two natural forces, Yin and Yang.

Yi itself has three meanings: simplicity, change and constancy. Change and constancy appear to conflict, but in reality they are the same, as only the fact that everything is changing is constant.

Fu-Hsi was a legendary figure in Chinese history. He was said to be the chief of a large tribe in Northern China (today's Xi-An). He spent his lifetime observing the changes of nature, from which he established a set of patterns (represented by symbols) which predict the complexity of changes of nature. He then taught his people such patterns to help them manage activities in their daily lives such as hunting and gathering, and avoiding disaster.

His concept of the genesis of nature is as follows: from (1) Wu-Chi (in the beginning), to (2) Tai Chi (not yet named), to (3) two Yee (Yin and Yang), to (4) four Hsiang (four different combinations of Yin and Yang), to (5) eight trigrams (eight combinations of two yin and one yang, or one yin and two Yang), and eventually to (6) the development of all living things.

The following diagram, often seen in prints, illustrates the points mentioned above. The two fishes, separated by an S-curve, are Yin and Yang. Note that neither is pure, as there is a spot (eye) of Yin in Yang, and vice versa. Yin and Yang are housed in a circle which is Tai Chi. The circle introduces two concepts:
(1) the importance of emptiness and
(2) any point on the line of the circle

is the point of beginning as well as the point of end. The eight trigrams, representing eight subjects (heaven, earth, mountain, lake, fire, water, thunder and wind) as well as eight directions (south, north, west, east, south-west, south-east, north-west and north-east) border Tai Chi.

Fu-Hsi used a broken bar as Yin and a continuous bar as Yang, and each is called an Ahou. A trigram, as indicated in the diagram, is made up of 3 Ahous: upper, middle and lower.
If we use any one of these trigrams to illustrate the relationships in nature the following table can be constructed:

AHOU	TIME	SPACE	INDIVIDUAL	CELL
upper	past	atmosphere	ectoderm	cell membrane
middle	present	living organisms	mesoderm	cytoplasm
lower	future	earth	endoderm	nucleus

This table tells us that time, space, parts of an organism, or parts of a cell cannot be separated, just like the three Ahous of a trigram. Separation of Ahous in a trigram is against the Law of the universe and will lead to destruction or death. This table also tells us that time is continuous, and that environment and living things are continuous, just like parts of our body or parts of a cell.

Finally, one may ask: "What does the future of biodiversity (conservation) hold?"

The answer is, of course, we don't know. However, if we follow a linear logic of reasoning, the future is going to be a total bust. That is because on one hand we have the continuous increase of human population (plus the wasteful and greedy tendencies in human nature), and on the other hand we have the continuous shrinkage of natural resources. These two things are going in opposite directions and sooner or later (some people think it is very soon) things will reach a breaking point - a point from which there is no return.

Yi-Tao tells us a different story. It says that Yin cannot go to an extreme without the resistance of Yang, and the same is true for Yang. Yin is in Yang and Yang is in Yin; neither can exist without the other, they are continuously striving to achieve balance.

According to Yi-Tao, the present imbalance of human population and natural resources is only a transition and the reversal of direction is not far off. For example, in 1993, the Russian population decreased by 800,000 which was unthinkable five years ago, and the virus that causes AIDS was unknown until 1980. More important still is the change in human attitude. When I was a young man, the public slogan was "conquer nature". Today we are talking about "to live with nature".

On a personal note, I am a hopeless optimist. I have a grandson who will be three months old on March 3rd and in two weeks I am going to see him for the first time. When I do, I'll tell him: "Grandson, your future is bright!" and I hope that someday he will tell his grandson the same.

Thoughts on Music

by
Prof. F.C.T. Moore
Department of Philosophy,
The University of Hong Kong
(The Runcibles is directed
by Susan Kuyper)

If someone asks me what I do, and I say "philosophy", it tends to stop the conversation. This is perhaps because philosophers have a way of saying things which are either very difficult to understand, which causes a feeling of impatience or bewilderment, or so obviously true that you wonder why they give their statements an air of importance.

I shall not talk *about* philosophy this evening. I shall ask a question, though I'm afraid that I do not really have an answer to it. The question is: why are people moved by music—why do they make it ?

The fact is beyond question. Music, though its forms vary, is enjoyed in every existing or past human society I have come across. It is true that there are some people who seem or claim not to respond to music: they are supposed to be 'tone-deaf' or 'unmusical'. And it is true that there are great and often fascinating variations of taste and style from group to group or culture to culture. But really these are the exceptions that prove the rule. Enjoyment of music is a universal human characteristic. People can be sent into a trance, physically stirred, sexually excited, spiritually calmed, moved to heights of meditation, elevated and transported by listening to or performing music. Plato wanted to ban most forms of music from his ideal republic—it threatened' 'spiritual pollution' . Basically, heavy metal was out and Gregorian Chant was in. Mencius, on the other hand said wáng zhi háo yué shén, zé qí guó qí shú ji hu (王之好樂甚，則齊國其庶幾乎), that is, 'if the king's love of music was very great, the kingdom of China would be near to a state of good government'. The theme of music as a moral force for good or bad is also universal.

But why should music be important ? It is just sounds, after all. Let's listen to a piece of music written in 1612 by Orlando Gibbons. (Glen Gould, when asked who was his favourite composer, once said 'Orlando Gibbons, for his inwardness.') The words come from a widespread myth that swans make most ugly noises during their life, but sing a song of exquisite beauty when they die:

The silver swan who living hath no note
When death approached unlocked her silent throat
Leaning her breast against the reedy shore
Thus sung her first and last and sung no more.

These words remind us that music is between culture and nature. The swan, like other creatures, is part of nature. But the myth makes the swansong something which goes beyond that. So we too perhaps, also being part of nature, discipline or coordinate our natural rhythms in some way which retains, but goes beyond our natural condition. This is very clear in religious music. We can listen to a motet of Heinrich Schutz written in 1625:

Ponder my words, O Lord
consider my meditation
O hearken unto the voice
of my calling
my King and my God
O my God, unto thee will
I make my prayer.
My voice shalt thou hear betimes
O Lord. Early in the morning
my prayer will I direct unto thee
and will look up.

This was a prayer. But why should we be moved by such sounds ? What is the relation between the natural rhythms of the body, our social tendencies to rhythm (like falling into step when we walk together), our ability to shake hands or bow to each other in a way which is usually co-ordinated, what is the relation between all these things and music ? It seems that in music we can remove these abilities for co-ordination from the ordinary commerce of life, so that their expressiveness can be indirect and symbolic, even for the most ordinary circumstances, like, let us say, what it is like to be a young girl married to an old man. We shall sing a song by Orlando di Lasso:

Quand mon mari vient de dehors
ma rente est d'être battue
il prend la cuillier du pot
á la tête il me la rue
J'ai grand peur qu'il ne me tue
C'est un faux vilain jaloux
C'est un vilain rioteux grommeleux
Je suis jeune et il est vieux

So, simple things like a prayer, a lament, a reflection, a woman grumbling about her husband, can all become something beautiful. The ambitions of Wagner for an all-encompassing music I personally find questionable and threatening. As everyone knows, the powers and origins of music are not a privilege of an elite, and are not there to overpower us, save when we are moved to conspire in that transport. There is the voice of ordinary people, with its own less imperious strength and depth. Here is an arrangement which I made of a song by the Beatles which is about music: something which we can dance to, but also something which goes back to our mothers and our ancestors, and something capable of wit.

> Let's all get up and dance to a song
> That was a hit before your mother was born
> Though she was born a long long time ago
> Your mother should know

I started by asking a question: why can we be moved by music ? Perhaps this is the right line of thought: music starts from the natural movements of our living bodies. But so does playing squash or golf. What is the point of these activities ? They seem to have only one purpose—winning. But what of the purposeless activity which is playing or listening to music ? Its way of abstracting from and sublimating our bodily existence, and imposing upon it various disciplines and other forms of regulation makes it into a self-contained activity, which does not even have the purpose of winning. This is how music can acquire an expressive power without limits. Aristotle, arch-intellectual, thought that the highest form of human activity was listening to a pure note, just because it had no further purpose. So music does not have any meaning, but it is endlessly expressive. This expressiveness does not depend on creating a code which tells you that this set of sounds has this and that meaning. Its expressiveness is already there. This is how quite ordinary words can become something else again in their musical setting. And it explains the remark of St Augustine that music involves organizing sounds in a way that satifies the moral sense, and Handel's remark, when he said 'I should be sorry if I only entertained people, I wish to make them better'.

A Robyn, gentil Robyn,
Tell me how thy leman doth
And thow shalt know of myne

'My lady is unkynde, I wis,'
Alac why is she so ?
'She lov'th another better than me'
And yet she will say no ?

'I cannot think such doubylness
For I find women trew
In faith my lady lov'th me well
She will change for no new'

Those are the words of a song, but the music represents the heart which beats. Dr Johnson said that music was 'the only sensual pleasure without vice'. I should prefer to say that it is correct passion.

Financial Aspects of Hong Kong's Replacement Airport

by

Dr. J. Dundas

Finance Director of Provisional Airport Authority, Hong Kong

Down the ages, mankind's efforts to conceive and construct huge capital projects have always captured the imagination. Usually they also raise indignation and cause controversy, and often face determined outright opposition. One reason for this may be that there have been some spectacular failures, which linger in the mind and influence us. It's a feature of human nature that we tend to be more critical of our failures than we are satisfied with our successes. Everyone knows about the biblical tower of Babel, which was destroyed by Divine intervention, or the pyramids in Egypt, which are still there, but which have had to wait four thousand years before becoming economically viable as a tourist attraction. Even the Great Wall of China, which I am told was functionally successful apparently took almost 1000 years to complete; an early case of project delay perhaps. All these examples make people cautious about large projects.

Propose any vast and imaginative engineering undertaking, and you may be sure of being met with a wave of scepticism and opposition before more balanced judgements come into play. There is a recent illustration of this right here in Hong Kong. No, I am not talking about the airport, not yet, I refer to the MTRC. I am a relative newcomer to Hong Kong but I'm told that the plan to build an underground railway here was widely ridiculed when first proposed. It wasn't needed; it couldn't be done; if it was to be done, it should be done any way except the way actually proposed; it would bankrupt Hong Kong and so on. But it was done, and Hong Kong's MTRC system is now the envy of every major city in the world.

The thesis that I would like to advance today is that the MTRC project had, in full measure, the three attributes that have always been essential for the success of major projects - Vision, Utility and Viability. If you look back over the three huge and heroic undertakings that I mentioned, - the tower of Babel, the pyramids and the Great Wall - you'll agree that although they all had Vision, only one, the Wall, had Utility, and none of them counted Viability amongst their virtues.

How does Hong Kong's new airport project measure up against the Vision/ Utility/Viability test. Well, I am a financial man, so I'd better not say too much about vision. We financiers like to think we have our fair share of it, but we're so busy trying to control other people's vision, we don't get much time to exercise our own. In any case, you don't have to spend too much effort studying the Airport Core Programme to reach a conclusion; of course it has Vision - the vision of a thriving internationally active 21st century city whose people and economy will be served by transport infrastructure that is as good as or better than any in the world.

What about Utility? How badly do we need this airport, and when? Here, with the help of perfect hindsight I come to the one major mistake that has so far been made. We started the project about five years later than we should have done. The reality is that we need the airport now, but are going to have to wait a few more years. Of course in the medium term that is not disastrous, though there will be a price to be paid - how large, - we will have to wait and see. In the meantime, just in case anyone still doubts my assertion on the absolute need for the airport, let me try to deal with this question of Utility with a few pieces of data.

Hong Kong's economy is based on international trade in goods and services. Its port and airport are the heart and lungs of its economy. The port is the world's busiest. The airport, today, is the world's fourth busiest in terms of international passenger and cargo traffic. The airport handles 20%, by value, of Hong Kong's international trade. It handles almost 100% of one particularly valuable part of our trade - the tourists, 7 million of them last year, who annually bring vast business to the Territory. Overall, airport traffic at Kai Tak has been growing at over 10% p.a. compounded for the past ten years, slightly faster in the past two or three years, a much higher rate of growth than at other major international airports.

Can you imagine what would happen if our airport business had to close its doors to the further expansion in trade and passenger traffic that is certain to continue as this region's development continues? The business and the tourists would go elsewhere. Hong Kong's loss would be someone else's gain. The insidious problems of relative decline would set in and spread through the affected areas of the economy to reach almost all of us. We must plan - and we have planned - to avoid this rather bleak prospect, although I am sorry to say that we will probably not avoid it altogether, because Kai Tak is likely to reach saturation before we can complete the replacement airport. Last year Kai Tak handled 22 million passenger movements. By now it is handling 24 million on an annualised basis. All this on a tiny inner city airport site, with no

conceivable scope for a second runway. Situating such a huge airport business right in the middle of a dense urban area is environmentally highly undesirable, and inefficient in terms of land use. These grounds alone might justify the replacement airport. But it is the urgent need for a second runway and associated terminal capacity that is conclusive. Although I expect the C.A.D. will somehow manage to get a little more traffic down Kai Tak's runway, no one now doubts that demand will exceed our capacity some time before the target opening date for the new airport. Hong Kong will thus lose some business it would otherwise have gotten; but assuming we can complete the new airport fast, the opportunity loss should be containable - and quickly won back.

So much for Utility. We need the new airport and we need it fast. Anyone who thinks otherwise cannot be in favour of Hong Kong's progress, and should be banished, or perhaps sent to live in Kowloon under the Kai Tak flight path.

What about Viability? Maybe we need the airport, but can we afford it, and what can be done to ensure it is cost effective? One way to look at this question is to see the airport as a business, an investment that needs to be paid for, but which then provides a service, and generates revenues, surpluses and dividends for its owner.

The airport as an independent commercial business - not long ago this would have seemed a strange concept, anywhere in the world. Airports were viewed as public infrastructure to be financed by Governments or municipalities out of public expenditure funding programmes, supported eventually by national or local taxation. But airports around the world have not escaped the revolution that has swept through the science and practice of public asset finance over the past ten years. Again and again, it has been shown that where such an asset can be constituted as a discrete identifiable business - whether a cross-harbour tunnel, a telephone network, a power distribution business, or an airport - it pays to run it as such, because the disciplines of independent commercial management tend to minimize the costs and to generate efficiencies that are hard to capture in the context of direct management by Government.

The Hong Kong Government has actually been a leading proponent of this way of thinking, and much of the infrastructure which makes Hong Kong successful is commercially managed and independently financed - irrespective of who owns it. So the PAA has been established, somewhat in the image of the MTRC, and given the task not only of building a safe and efficient new airport, but also of ensuring its commercial and financial viability.

The basis for success in that mission will be control of costs and maximisation of the airport's business potential. I won't dwell on the cost side today, except to say that the cost estimates are well within international norms, and that to date actual costs have all be within our budget. If we get a clear run at finishing the project, I am confident that our eventual record on costs will look very good. If we are delayed, there will be cost problems, though the underlying economics of the project would remain sound.

With all the attention on cost, not so much has been said about the airport's business potential, about its revenues. Well let me assure you that any properly managed facility that handles 30 million people and 1 $^{1}/_{2}$ million tons of cargo every year has very large revenue potential. Most of that revenue will be linked to traffic movements. Hong Kong's traffic is very strong indeed, and all forecasters predict continuing growth, not least on account of the rapid development of aviation in China. Airlines pay charges to airport operators for landing and parking their aircraft. Other revenues are generated by the support services essential to any large airport such as cargo handling, aircraft catering, maintenance and fuel supply.

Then there is the terminal itself. Early airport terminals were little more than hangars or halls where people waited, in greater or lesser degrees of discomfort. I am sure many of you can think of airports like that, even today. Hong Kong's replacement airport will not, must not, have that sort of terminal. I can't possibly do justice tonight to the terminal design which is now 75% complete. I can tell you however that it will have 35,000 square metres of space for passenger catering and shopping, which is 3 $^{1}/_{2}$ times as much space as is available at Kai Tak, as well as all the necessary facilities to make a trip to the airport enjoyable. Experience at other very successful airports - like Schiphol in Amsterdam or Changi in Singapore - shows that this approach not only works in terms of customer satisfaction; it also generates large revenues which pay the running costs of the airport and help to keep it competitive in terms of airport charges.

I had promised myself that I would not burden this audience with dry financial statistics, but I can't resist giving you a few simple numbers. The financial projections released by the Government last year show that the total revenue of the Airport Authority from all these sources, based on rather conservative traffic projections, will be more than HK$8 billion, in its first full year of operation, while the Authority's annual operating cost will be around HK$1.5 billion. The difference or surplus of over HK$6 billion, that is almost a billion US dollars, will be available to pay any interest or other borrowing costs, to help with further expansion, and eventually to pay dividends to the Authority's sole shareholder the HK Government.

Now these numbers are projections, but they were conservatively estimated, and we have a fair degree of confidence in them, not least because we know the revenues being achieved at Kai Tak today and we can anticipate what will change, in terms of available space and actual traffic, at the new airport. I have no doubt therefore that this project can and will be entirely self-financing. Perhaps more importantly that is also the opinion of the world's banking and capital market community, who have shown themselves eager to participate in our future funding.

One final nugget on finance. The numbers I have quoted take no account of two other huge gains that will accrue from the closure of Kai Tak - the environmental dividend to the people of Kowloon, and the land premia that the Government will earn on Kai Tak's redevelopment Government should easily recoup its equity investment in the Airport Authority from this last factor alone. From that point of view, Hong Kong will be getting its replacement airport, with all its benefits, for no net costs to the fiscal reserves - not a bad outcome, I would argue.

So the airport unquestionably passes the Viability test, as well as meeting the requirements for Vision and Utility. Given the necessary agreement in the Joint Liaison Group, the Airport Authority will succeed in financing the project without further recourse to Government beyond whatever initial equity injection is eventually agreed; it can look forward to financing further stages of expansion, which will certainly be needed, without any recourse to Government whatsoever; and it can expect to pay a large and rising financial dividend back to the people of Hong Kong from early in the next century. We are already well under way. We have reclaimed over 350 hectares at the Chek Lap Kok site in record time and have committed more than 25% of what we expect to spend up to airport opening. For Hong Kong's sake we have to stick to our task and finish the job.

Vision, Utility and Viability. These qualities the project has. What it needs now, I guess, is a little luck and of course the right Feng Shui.

Influenza — Man to Animal

by

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It may come as a surprise to learn that influenza, a common human infection, is naturally an infection of certain animals particularly aquatic birds. The prime reservoir of influenza viruses is the migratory duck, in which they live harmlessly in the intestine. They are excreted in the faeces and may be carried by the ducks over great distances.

Almost certainly, the domestication of the migratory duck in China around 2500 BC increased the opportunity for human contact with these animal (avian) influenza viruses ultimately resulting in the disease we now know as *influenza*. This opportunity reached its peak around the middle of this millenium when the domestic duck was preferentially raised as an adjunct to rice farming in southern China, a practice that continues to this day in which countless millions of ducks are raised year-round. This has given rise to an environment literally saturated with animal influenza viruses (Figure). And it is from southern China that new pandemic human influenza viruses periodically arise to sweep around the world, their progeny variants continuing to do this for some years thereafter. Consequently, southern China is now considered a hypothetical influenza epicentre.

An intriguing question is how an avian influenza virus living in the intestine of a domestic duck at around 41°C is able to become established in the respiratory tract of man at 37°C or lower. Increasing evidence suggests that the domestic pig is able to facilitate this by acting as an intermediate host through inhaling dried, duck influenza-infected faecal matter into its respiratory tract where the virus multiplies and reassorts its genes with a resident porcine influenza virus. In the process, the avian influenza virus seemingly acquires the genetic characteristics of a 'human' influenza virus; the tracheal cells of the domestic pig have receptors that allow both types of influenza viruses to multiply in it. Many millions of pigs are raised in China in close association with domestic poultry and man, particularly in the south, conditions that favour interspecies transmission of influenza viruses.

Influenza pandemics occur infrequently, the last one being the H3N2 (Hong Kong) pandemic that emerged through Hong Kong from Guangdong Province in 1968. Distant relatives or variants of this virus remain to the present, but are relatively mild. As the Hong Kong influenza era is now 28 years on, there is

increasing concern that a new pandemic will occur in the not too distant future; available evidence suggests that it will most probably emerge again from China.

Armed with this understanding on the origin of new pandemic influenza viruses, we are now in the position to react more quickly and with greater certainty to a future pandemic, and so save many lives. Unfortunately, the abundance of 'non-human' influenza viruses in animals, particularly in southern China, makes it difficult to determine which one of them will cross the species barrier to man, and so cause the next pandemic. Whilst it is possible that an incipient pandemic may be first recognized by significant outbreaks of influenza or influenza-like illness in pigs in China, more than likely the first signs of the pandemic will be in man. Thus, speed in isolating and identifying the new virus once it has appeared in man and making it available to manufacturers sooner, are critical for the production of an effective vaccine if we are to blunt the impact of the pandemic around the globe.

In these days when the effects of prevailing variants of the 'old' Hong Kong flu virus are relatively mild, it should not be forgotten that not only is influenza an important on-going global health problem claiming many lives directly and indirectly, but it caused probably the greatest catastrophe known when the pandemic of 1918-19 claimed an estimated 20-40 million lives. History books pay scant attention to this.

And why does the influenza virus have this potential for human devastation? My view is a simple one. Man has intruded on the environment of the animal, and in doing so, has allowed himself to be exposed to their viruses. Animal influenza viruses are now trying to gain access to the human intestine as another home, but it is anatomically and physiologically not possible for them to become established there. Instead, they have to content themselves with the respiratory tract to which they are poorly adapted, giving rise to various levels of influenza in the process. Thus it would seem that there will be continuing cycles of influenza caused by different influenza viruses residing in animals, the severity and duration of each cycle depending in part on how well each new virus is adapted to the human host.

Given that half the world's population will be living in urban conurbations by the year 2000, conditions that favour the spread of droplet-borne respiratory infections, there is every likelihood that influenza will be a significant health problem for future generations. It remains to be seen whether a suitable antiviral agent will be found that will control the virus.

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(Figure)

Ducks on a flooded rice field in southern China. The water is static and faecally contaminated, and is in effect an 'influenza virus soup'. Once the rice begins to flower, the water is removed and the ducks placed on nearby watercourses and ponds. After harvesting, the ducks are introduced onto the dry fields to fatten them for market by feeding on fallen grain that cannot be collected. In this beautifully balanced ecosystem, ducks do not consume precious grain needed by man.

College Seminars (93-94)

A Brief History of Computers

by

Kai Ming Shea

Department of Computer Science

Abstract

Once upon a time, the term computer referred to the person who performs calculation manually. Despite its dominating function in our society today, the electrical computer revolution started less than 50 years ago. Let us take this opportunity to enjoy the colourful history of the computer. In this talk, I shall bring you along a time passage and call on the memorable events of the first invention of electrical computer, generations of computers, the rise of micro-electronic technology and micro-computers, the introduction of Reduced Instruction Set Computer (RISC) and the recent development of multiprocessors.

Introduction to the Chemoton Theory

by
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Department of Chemistry

Abstract

What an organism feeds upon is negative entropy. Or, to put it less paradoxically, the essential thing in metabolism is that the organism succeeds in freeing itself from all the entropy it cannot help producing while alive.

Erwin Schrödinger

The title of the source of my motto is **What is Life?.** Scientists very often ask this question, but usually fail to answer it. One reason for their failure is the lack of the definition of a living system. In the early seventies a new theory was developed by a Hungarian scientist Gánti, who called his model a **Chemoton.** This system was defined as the minimal living system, that can satisfy the *Criteria of Life*. This system is not a real one but an abstract mathematical model, like the point in geometry that is not an equivalent of a dot drawn on a piece of paper. The first thing to be emphasized is that we can argue about the border drawn between the living and non-living nature only if we have a definition, which makes a difference. Without the definition, those questions, like **Is a virus a living organism or not?** are totally meaningless. So Gánti declares the following criteria to be typical of a living organism.

Real life-criteria:
- *The living system must be an inherent unit. - The living system must have metabolism.*
- *The living system must have inherent stability.*
- *A living system must have a subsystem, that stores information about the whole system.*
- *Every process in a living system must be regulated and controlled.*

Potential life-criteria:
- *The living system should be able to grow and breed.*
- *The living system should be able to suffer hereditary changes.*
- *The possibility of death.*

The chemoton itself consists of a two dimensional liquid membrane subsystem, that separates it from the environment, an auto-catalytic chemical cycle and a template polymer. The monomers of the template and the precursor

of the membrane forming molecule are side products of the pathways of the cycle. We suppose that the membrane is semi-permeable so certain chemicals can penetrate it while others cannot. For our model we usually assume that for the nutrient molecules it is not a barrier while the cycle intermediates, the template monomers and the membrane precursors cannot get through it. It is also completely permeable for the waste materials and for the solvent (water).

The minimal system is so simple indeed that it most probably does not exist in the real world, but it can be modeled by a computer. Modeling a chemoton means to describe its inner pathways, write down the kinetic equations that specify the reaction rate constants and the initial concentration of each type of molecule and feed these data into a computer. If you have a program in your computer that can calculate the solution of a differential equation system (that is the mathematical representation of this model) you will get some data series (or if you plot them on graphs) that are representations of the concentration change in our model organism. Providing some more instructions to our computer we can define which is the moment of the division.

This was exactly what some people (including myself) did and the result is quite surprising. We expected this model organism to be able to grow and proliferate but almost nothing more. But it can compensate the decrease of the nutrient material (several tenfold decrease in the concentration of the nutrient causes just a minimal change of the generation time (the time between two divisions) because the ratio of the intermediates of the auto-catalytic cycle also changes so the rate of the nutrient consuming reaction (which depends on the product of the concentration of the nutrient and the concentration of the molecule reacting with the nutrient) remains nearly the same. So our system does have inherent stability. We expected it to be a unit and to have metabolism because we designed it to have these properties.

What about the controlled processes?

They are of course controlled. The start of the template poly-condensation and the subsequent membrane synthesis functions as a clock in the system that synchronises the inner processes and triggers the division of the chemoton. It is also a result of computer simulations that the amount and length of the template molecules influence the generation time and what is surprising the bigger chemotons proliferate faster. It is indeed the possibility of inheritary changes because once for whatever reason the amount of the template polymers changes it will be inherited because this molecule is copied before each division and also it will affect the growth and proliferation rate of the subsequent generations so a change can happen that will be inherited. Most

probably the possibility of growth and breeding is self evident after this discussion and the possibility of death is also acceptable in this system because if - in an imaginary experiment - we introduce some chemicals into our system that destroy at least one subsystem of the chemoton it will be certainly another system that does not have the same properties so as a chemoton it will be dead.

This means that a chemoton can satisfy all of the *Criteria of Life* so it really can be a model of a living system.

Knowing Yourself, Knowing Your Supervisor/Student: a Task/Human Relationship Oriented Approach to More Effective Relationships

by

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Abstract

Late 1940's Ohio State University studies identify two distinct leadership styles (as described by subordinates.) **Initiating structure** indicates the extent to which a leader defines task structure and personal roles. **Consideration** is a description of the extent to which a leader develops job relationships built on trust, respect and regard to feelings and concern.

University of Michigan's Survey Research Centre attempts to locate behavioural characteristics of leaders identifying two dimensions: **production oriented and employee oriented** styles . (Robbins S. P. in Organizational Behavior; 1991, pp 397 &398)

It has become apparent since then that using these models to manage groups more effectively and productively by identifying leadership style shows no consistency. This is related to the problems encountered in the relative complexity of group culture and dynamics. However, the relationship between a supervisor and research student/assistant removes the uncertainty of third party 'contamination' except in the unfortunate case of joint supervision.

This brief presentation seeks to introduce the usefulness of a fuller understanding of leadership/followership styles through the above dimensions to develop closer and more productive relationships at this level in academia.

Mobile Communication Systems in Hong Kong

by

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Abstract

Mobile communication is now gaining increasing interest as we are coming to the age of information, especially in a society like Hong Kong. Inasmuch as it is a commercial and service oriented place, the mobility of people and the demand for information gathering are tremendously large. To keep pace with this dynamic world, mobile communicator is an essential tool for us.

Nowadays various kinds of mobile communication systems are blooming in the market, such as paging for one-way messaging, cordless telephony and cellular radio systems for voice communication, mobile data network for duplex data transfer and private mobile radio for close user group communication. In Hong Kong, paging is the most popular means in telecommunication because of its low price. Besides numeric and alphabetic paging, voice mail is also now available as a "customer-friendly" service. Yet paging is essentially a broadcasting system for one-way calling only. The next branch of mobile radio is the recently very popular cordless telephone system. This includes domestic cordless system (CT1), the second generation cordless phone (CT2) and CT2plus, which is simply the combination of a CT2 and a pager. However, cordless telephone services are basically limited by the non-contiguous coverage between base stations, outside which no call can be transmitted. Therefore in a sense cordless telephones are just like portable coin-phones. Cellular phone system, on the other hand, is truly a two-way calling voice communication system. It can be used for outdoor, fast moving environment as the cellular system has a large contiguous coverage, and of course, more complicated switching and signaling mechanism between base stations. In Hong Kong, aside from the first generation analogue systems (AMPS and TACS), more superior second generation digital systems have now emerged (GSM and USDC or Digital AMPS). Advantages of the new digital systems include higher voice quality, privacy protection with the use of SIM (Subscriber Identity Module) card, and provision of services like short messaging, voice mail and data transmission.

Through the evolution of mobile communication means in Hong Kong, it is not difficult to see that the concept of *mobile office* is emerging as the methodology of future business office. Other than voice services, the demand for data communication is becoming the key issue for the coming age, and that

is why new technologically advanced digital mobile systems have emerged. The expanding range of services offered, and the more affordable price further enhance the attractiveness of mobile communication.

In the future, ubiquitous, high capacity and high quality communication will no longer be a myth—you can sip coffee in the cafe at Repulse Bay, while listening via your mobile handset to an orchestra performance mobile transmitted with compact disc quality from a base station located at Sydney Opera House. Everyone will have their personal number stored in a smart card. It will be used to login and personalize any mobile communicator, which will support communication of voice messages, computer data, fax, audio and even video signals. Such a small and inexpensive mobile communicator will be called an "All in-one" unit—an integration of pager, cordless phone and cellular phone. Ultimately we will enjoy communications services "ANYWHERE AT ANY TIME TO ANY PERSON" with this "ALL-IN-ONE unit".

Nature and Singapore

by

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Abstract

The island that was called Temasek before the 14th Century was a sparsely populated island covered with lush tropical forests stretching from the hills right down to the coast. Things changed after the landing of Sir Standford Raffles in 1819, who later made it into an active trading post. There was no turning back from then on. Temasek, now the Republic of Singapore is a thriving city-state made up of the main island and surrounding smaller islands, having a total area of 574 km^2. The Majority of the population of 2.8 million lives in the main island. The available land is used for commerce, housing, agrotechnology and man-made parks. Despite intensive land use, there is still quite a bit of nature left. In the Northwestern coast of the main island and along the coasts of many of the outer island are mangroves or beach forests; and right in the heart of the main island are forests, both primary and secondary. There is the Bukit Timah Nature Reserve which had been established from around 1883, now 75 hectares, the Labrador Nature Reserve, 4 hectares, and the Central Water Catchment with an area of 2059 hectares. There are also coral reefs in the Southern Islands. Due to development both in the past and present, many species have become extinct. Floristic extinction is impossible to quantify reliably but at least 100 bird species, 20 fresh-water fish species and several specie of mammal have been lost. Many man-made, open habitats have become dominated by exotics and introduced species of fauna. Notwithstanding extinction and competition from introduce species, there are still endemic species worth studying and conserving as we still do not know the ecological role which they play.

Pathogenesis and Treatment of Peptic Ulcer Disease

by

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Abstract

The incidence of peptic ulcer disease has declined dramatically in the past few decades, thanks to new discoveries about the disease process and the invention of new drugs . However, despite the decline in its incidence, the number of new and recurrent cases still poses a serious medical problem to health and provider, because of its staggering medical costs which accounts for about 10 percent of the total medical care expenditure by the US government for gastro-intestinal diseases. With enlarging body of data indicating that patients with peptic ulcer have both basal and stimulatory acid level, very similar to that of normal subjects, researchers and clinicians have started to take a second look at the dictum "No Acid - No Ulcer" which has served as the basis for treatment of peptic ulcer disease in the past. Also with the recent discovery of H. *pylori* in the gastric mucosa of ulcer patients, the pathogenesis of the disease has taken a complete overhaul. Peptic ulcer disease is now no longer looked upon as simply due to acid over-secretion, but rather as an imbalance between aggressive and defensive factors. Some factors which in the past, have been regarded as an important in the disease causation have been discarded while those that seemed irrelevant before, are now accepted as an important contributing factor in the cause of the disease. With this new understanding, more and better drugs are now available for treatment of the disease, which is based on the specific causative factor. Yet, since medicine is not a perfect science, a concept that we know now may be totally changed in a few years time.

India - The Mother of Religions and Philosophies

by

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Abstract

What is India? 900 million people, diverse cultures, various religions, different languages, mountains, deserts, rivers, green fields, spreading across over 3200 kilometers from north to south and almost the same distance from east to west ----- That is India. In its vast landmass, people have developed a common attitude, common aspirations; and this despite no common unity of race or religion or language. India has various kinds of religious opinions and practices, among which are the Hinduism, Muslim, Christianity, Jainism, Sikhism, Buddhism and so on. A number of languages like Hindi, Gujarathi, Tamil, Telugu, Kannada and Marathi are spoken by the Indian people even today. A distant observer who looks at India with detachment and penetration would be struck by two mutually contradictory features: diversity and unity at the same time. To know more about the root causes for the existence of so much diversity in India, one has to look at the three different periods: Ancient India (3000 BC), Medieval India and Modern India.

Ancient India: A spectacular chance discovery in the 1920s, made when a railway track was being laid in Sind (now a province of Pakistan) led to the excavation of the remains of an urban civilization that was more than 5000 years old. The important cities to be unearthed, Mohenjo-daro, Harappa and Chanhu-daro, lay on the banks of the river Indus, and so historians have referred to this as the Indus Valley Civilization, which flourished during 2500-1700 BC The foundation of the Civilization of India was truly laid in the glorious epoch when the people who called themselves Aryans colonized one district after another of this country. Amidst the turmoil and ravages of foreign invasions, and the rise and fall of dynasties, the perennial stream of Aryan civilization has flown unabated in this country.

The Indus Valley Civilization is characterised by the chess-board pattern of its cities with a citadel, elaborate drainage system, beautiful pottery, bronze objects and a pictographic script. However, the gradual disappearance of this civilization are still being sought by the historians. The religious literature assigned to this period provides ample information on rituals and ceremonies and the evolution of the philosophy now known as Hinduism. The literature also describes the growing wealth derived from agriculture and trade and a society well divided into occupational groups. The ideal concept of society is

one divided into varna, the caste divisions consisting of the *brahmins* (priests and teachers), the *kshatriyas* (the princely, ruling and warrior caste), the *vaisyas* (traders caste) and the *sudras* (manual labourers, slaves). However, with the passage of time, the caste system became much more complex, with the multiplicity of sub-castes. The worst affected by the caste system were of course the *sudras*, who are still being treated as slaves and untouchables by the upper castes even today. It was for them that Buddhism offered salvation and liberation. Buddhism still remains the most important discovery of India for a great majority of Asian people. The Art and Architecture of Burma, Thailand, Korea, Japan and China and hence world art would be much poorer without Buddhist motifs developed under Indian influence. However, Buddhism lost its roots in India because of the Hindu religion domination. Much later, Christianity attracted the untouchables and the poor masses in much better way with their good community services.

Medieval India: The invasion of Islam has shown a profound effect on the political, religious and socio-cultural life of India. The invasions of Muhammad bin Quasim (711-12), Mohammed Ghazni (1000-1024), and Muhammad Ghori (1175-1205) marked not only the clash of arms between the Hindu Rajput kings and the muslim invaders but also the violent contact between the two strong religious thoughts. India, on the eve of muslim invasions, presented the case of a rich country with weak political structure, poor masses and still poorer defense. There was no single leader to attract and motivate the masses of India to protect from the muslim invasions. This is due to the fact that there were many kings ruling India that time. From confrontation to cooperation between the two religions, it constitutes the various stages in the long socio-cultural history of medieval as well as modern India.

Modern India: The most notable event of the modern times of India is the freedom struggle for independence from the British rule. It was in 1600, the British had arrived in India representing East India Trading Company, on spice trade. Later, as the trade brought enormous prosperity to the home country, they saw the need to gain administrative control over the Indian territory. The company officers started interfering in the local politics, and sometimes forced, in order to protect their expanding commerce. With Britain's victory in the Plassey battle in 1757, the British conquest of India truly started. In less than a century, a company of traders was metamorphosed into a sovereign power, its accountants and traders into Generals and Governors. Britain had become the successor to the Moghul Empire, which almost collapsed at the beginning of the 18th century. After 258 years of fruitful activities, the company's rule was abruptly terminated and transformed into the hands of Queen Victoria. This coincides with the rapid spreading of Christian religion in India.

With the foreign invasions, local wars, and lootings, the Indian economy was shattered. Then the idea of Hind-Swa Raj (Indian Home Rule) came into the minds of the Indian people. For a century fraught with violence, it was Mahatma Gandhi who had offered an alternative, his doctrine of Ahimsa --- nonviolence. He had used it to mobilise the masses of India to drive England from the sub-continent. Due to the stubbornness of some muslim fanatics, the united India was divided into India and Pakistan. Finally, on the mid-night of August 14, 1947, India had awakened to life, freedom and self-rule, ending the British Empire and the independent rule of the 565 princely states. India is now one country-one leader.

A Task that You can Do but Your Computer Can't

by

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Abstract

Over the past several decades, we have seen a dramatic rise in the popularity of computers. Computers act an important role in the modern world. They speed up the world a lot, and solve many sophisticated problems. Computers were invented in 40's. In these fifty years, the architecture of computers has changed a lot. The most significant advancement is the size and the speed. In addition, the price is much more reasonable than before.

The invention of computers draws the attention of many scientists to how powerful computers are. What problems can be solved by computers? Many people raise the question: "Can a computer be as clever as a man?". Before the first real implementation of a computer, Alan Turing (the Father of computer science) gave a negative answer to the question in 1936. He performed a task that a man can do but a computer can't. It is the well-known problem: the Halting Problem. He proved the non-existence of a program that can check whether any program halts or not.

A computer is basically an instruction executing machine. A computer program consists of a sequence of instructions which instructs a computer to execute jobs. A program can be viewed as a *black box*. Given an input to a program, it will eventually give the output after some computation. A program is said to be *good* if it always gives the output and halts. However, if the program is not well-designed, it may loop forever and will not give any output. In this case, it is not a good program. Alan Turing proved that we cannot have a good generic program to check whether any program running on an input will halt or not. That means, a computer cannot do the task of checking whether any program running on an input will halt or not.

We are going to prove a particular case that there exists no good generic program to check whether any program running on itself as input will halt or not. The idea of the proof is the use of contradictory argument. On the contrary, suppose that there is a program C which checks whether any input P will halt or not on running P on input P itself. From C, we construct another program D which replaces every instructions of C that saying "yes" (i.e., running P on input P will halt) with the instruction of "loop for ever". Then, let

us see what will happen if we run the program D on input D itself. Only two cases are possible. (1) The program D halts eventually and gives the output "no". (2) The program D loops forever and never gives any output. In both cases, they lead to some contradiction.

Visual Impressions in North Africa

by
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Abstract

The smallest country in the Maghreb, Tunisia, is 164,150 km^2 and has a population of around 7 million; the largest and most central country Algeria is 2,993,000 km^2 and has more than 23 million inhabitants. The economy of the two North African nations is based mainly on agriculture and mineral resources, in Tunisia is also tourism. Both countries have a strong growth in population and extreme differences in population density. There is a big concentration of people, administration, economic activities, and infrastructure in the more humid and fertile areas of the Mediterranean coast, while there are a lot of problems in developing the arid central and southern regions, because of the environmental disadvantages of the steppe and desert. The inhabitants of Tunisia and Algeria adapt by using specific forms of acculturation to cope with the quite difficult living conditions in this nature. The following visual impressions should show typical examples of landscape and life-forms in North Africa:

Landscape forms:	Life forms:	Rural settlements:
Coastal plantation are as like Cape Bon	*Historical cities like Carthage*	*Nomadism*
Salt lakes like Chott	*Capital cities like Tunis*	*Loft-and hole houses like Djerid*
Sand-, detritus- and rock desert with oil-fields like Hassi Messaoud	*Religious cities like Kairouan and Ghardaia*	
	Oasis cities like Tozeur and Nefta	
	Caravan cities like Ouargla regional cities like Constantine	

Urban Planning: Dreams of Living in an Urban World

by

Fulong Wu

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Abstract

The 20th century witnessed the emergence of an urban world. In developed countries, the level of urbanization can reach more than seventy per cent. Urbanization has great impacts on people's way of life. While enjoying modern facilities never dreamed of by former generations, people begin to suffer from industrial pollution, traffic congestion, noise, unemployment, and rapid rise of housing prices. Urban planning attempts to solve these problems. Originating from the need for improved sanitary conditions and the city beautiful movement, urban planning intends to provide residents a better living environment. From the Garden City to the Dispersed Metropolis, urban planners designed cities according to their understanding of the ideal city model. Since the middle of this century, public participation has been introduced into planning process, and it becomes critical to obtain public consensus to decide where our cities should go. The major function of urban planning shifts from the vision of future city pattern to the control of incompatible land uses. Urban planning has also acquired legal status, for example, through zoning ordinances. The rationale behind planning is to cure market failures through governmental intervention in development process. Planning becomes more like a mediation and compromises process. Unfortunately, the function of development control is challenged by the recent shift in civic culture towards entrepreneurialism. Planners become deal-makers rather than regulators. Even the planning can effectively control developments, it is no longer interested in the provision of the vision of a good life. It might be the time for urban planning to regain its vision now. Our cities have undergone dynamic changes. A global economic restructuring leads further decentralization of city structure. "Edge cities" have emerged at urban fringe. Along with the coming information era, would our cities experience further decentralization, and eventually there would be no distinctions between the city and rural area? What will be the impacts on the everyday life of people? All related questions have to be asked and answered before there could be a "real" urban planning. Take Hong Kong, one of the densely populated cities, as an example, what kind of changes will take place in the future development? Because of the constraints of physical environment, a model of high density development has to be adopted. Redevelopment of the old city area becomes increasingly important in city construction. Under the circumstance that low density development is not possible, then what will be the ideal form of

development? If the high density development will continue to be the form of future development, then through careful planning, the negative effects should be minimized. As most cities in mainland China have a high population density, the experiences in high density development should be relevant and very useful. As a new land use system has been adopted in China, the urban development will rely more and more on the operation of markets. It is obvious that a sound development control mechanism should be set up in order to solve the problem of negative externalities and to promote public interests. The urban planning will inevitably undertake a task of growth management. However, with the increase of bureaucratic procedure, will urban planning in China meet the same fate as that in Western cities? That planning is evolving towards merely a tool of land management seems to be a global trend. It would be a tragedy if planners thus lose their imagination and enthusiasm for a good life. The history of planning reveals that after all, the ultimate purpose of urban planning is to create dreams of living in an urban world.

Safari in East Africa

by

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Abstract

In Africa, quite different from the mild Mediterranean region or desolate Sahara in the north, and unlike the tropical seasonality of rain forest in the west, around the Equator in the east, we have East Africa Highland with vast plains and folded ranges. Over there, it supports a large number of animals of various kinds both grazer and predator. Because of the relative openness of this savanna, animals can be easily observed and studied. And this is the venue of our safari.

In East Africa, there are many famous national parks and game reserves. One of the most famous parks in Kenya is Masai Mara National Reserve. Masai Mara, an area of about 320 km^2 open grassland with some scattered trees, is the homeland of Maasai - a big tribe in Kenya. All the animals commonly found in East Africa can be easily seen, including giraffe, cheetah, hyaena, hippopotamus, ostrich, vulture, numerous species of antelope and the big five: lion, buffalo, rhinoceros, elephant and leopard. The most spectacular scene of this reserve is the migration of wildebeest. For the past 2 million years, over 1.4 million[1] wildebeests, 0.8 million gazelles, zebras and impalas and so on are taking part in this annual event. They migrate north from the Serengeti of Tanzania in July-August in search of grass of which the growth is determined by the moving rain belt around the Equator during seasons.

Lake Nakuru National Park, which covers an area of around 200 km^2, is another spectacular sight in Kenya. Over two million of flamingos and tens of thousands of other birds live in this soda lake located in the Great Rift Valley. This Rift Valley is a part of the East African Rift System, stretches from the Dead Sea in Middle East to Mozambique in the south. The volcanic activities accompanies with the rift system lead to the formation of chains of lakes and volcanoes in East Africa. Thus two of the highest mountain in Africa, Mt. Kilimanjaro (5895 m) and Mt. Kenya (5199 m), can be found in this region. In fact, the Great Rift Valley is also believed as the birthplace of humanity since the discoveries of a skull carbon dated of 2.5 million years old.

Ngorongoro Conservation Area in Tanzania is another highlight of the safari. Ngorongoro is one of the many extinct volcanoes found in the Great Rift Valley. The enormous crater left behind has a floor area of about 260 km^2 and

about 610 m below the rim. Unlike Serengeti-Mara plains, the animals must migrate when the wet season is over, natural irrigation in the crater can support the habitation through the year. Therefore, the crater is a complete system with over 25 thousand mammals permanently residing on the floor. In the crater, you will definitely see rhinoceros, lion, buffalo, elephant, many herbivorous animals as well as flamingo and many other birds.

The safari in East Africa gives us a great exposure to the animals and environments. Thus, we can have a better understanding of this complex ecological system in which animals can exploit their environment in a harmonious way. We will then surely discover the wonder of nature and be in support of wildlife protection.

Reference:

1 In 1980 counting

Fungal Endophytes

by
Jane Fröhlich
Department of Botany

Abstract

The **fungi** are a group of organisms which are neither plants nor animals. Unlike plants, fungi cannot harvest energy from the sun and transform it into chemical energy. Therefore, fungi rely on their environment to supply them with organic compounds and nutrients. Fungi usually grow in or on, and obtain their food from, living or dead plant tissue. They may seriously harm, have no effect on, or even benefit the plant that they live on their **host**.

Fungi that live as **endophytes** live inside healthy plant tissue and there have been many scientific studies to show that both the fungus and the plant may often profit from this close relationship. The potential advantages to the fungus are:

1) A relatively safe and consistently moist environment without extremes of temperature and
2) A reliable source of organic substances and other nutrients that it needs to live.

There is some cost to the host plant in providing "food" for the fungus, but it would appear that endophytic fungi often more than compensate for this cost by significantly increasing the chances of survival of their plant host. The fungus may benefit its host plant by:

1) Producing toxic, or unpalatable substances that discourage other organisms from eating the plant,
2) Altering the physiology of the plant so as to increase its productivity, efficiency and/or tolerance to environmental stresses,
3) Producing chemicals which inhibit or discourage the breeding of organisms which not only feed on the host, but also carry diseases between host plants and
4) Competing with other fungi which are harmful to the plant.

Endophytes are found in a wide variety of plants including marine algae, flowering plants and conifers. Because of their economic importance, it is the grasses which have been studied most intensely, especially after 1982 when it was discovered that the presence of an endophyte in perennial ryegrass

(*Lolium perenne*) made the plant resistant to attack by an insect, the Argentine stem weevil (Prestige *et. al.*) and subsequent studies showed that the fungus also provided enhanced resistance to sod webworms (Funk *et . al .* 1983, cited in Clay, 1988), billbugs and crickets. Since then, endophytes have been found infecting at least 80 grass genera and several hundred species (Clay, 1990) and many other associations between grasses and fungal endophytes have also been shown to be of mutual benefit (Clay, 1986 cited in Clay, 1988).

The benefits conferred by some endophytic fungi on their hosts are so significant that they have great economic potential. Scientists are now producing, through genetic engineering, highly productive strains endophyte-infected grasses for turf and animal forage. These grasses are also valuable for their resistance to pests and diseases and offer an attractive alternative to chemical pesticides.

This seminar will look at a number of specific relationships that exist between fungal endophytes and their hosts, and also briefly, at how these relationships may have evolved.

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Health Policy and Economic Development in Singapore

by

Dr. John T. Purcal

Lingnan College, Hong Kong

(Visiting Lecturer)

Abstract

Health as a factor in development received substantial recognition by the publication of World Bank Report, Investing in Health in 1993. Health status is one of the significant factors in economic growth and development. First, it is an indicator of economic development showing whether an economy is successful in meeting the basic needs of the population. Second, health is a significant form of human capital, and investing in health leads to further development of the economy. Last, health is important in that it affects fertility rates which play a crucial role in economic development. Today's lecture will focus on these aspects of health in looking at health and economic development in Singapore. The economy of Singapore has grown 9.8 per cent in 1993 and similar economic performance was achieved during the last two decades. During this period of rapid economic growth, Singapore also made remarkable progress in the delivery of modern health services. What is significant is that Singapore was able to deliver these services at a cost much lower than in most industrialized countries. National expenditure on health, including public and private expenditure is 3.1% of GDP, compared with 5.7% in Hong Kong and about 13 per cent in the United States. The government of Singapore, despite its current low cost on health, is concerned about the future. Expenditure on health is rising faster than economic growth in most industrialized countries. In Singapore too, costs are estimated to go up because of aging population, increasing wages and salaries of the health professionals, the rising affluence of the population and the greater use of expensive drugs and medical technology. This lecture looks at these concerns and specifically focuses on the strategies and policies adopted by the government in containing health costs.

Urban and Architectural Development in Old Shanghai

by

Dr. Jiang Wu

Tongji University, Shanghai.

(Visiting Lecturer)

Abstract

PART 1: CITY

1) A long History
- The ancestors in Shanghai: 4000 BC
- The embryonic time of the city: AD 8C.
- Official establishment of the city: Aug. 19, 1291.
- An important port of China: after 15C.
- The first Customs House was established: 1685.
- The Opium War: 1840.
- Became a Treaty Port: 1843, Shanghai was forced to be an international commercial port thrown open to the West.

2) Imperium in Imperio: Foreign Settlements
- The first British Settlement: 1845.
- The first French Settlement: 1848.
- The first American Settlement: 1848.
- British and American Settlements merged into the International Settlement: 1863.
- Expansion of the foreign settlement
  0.58 km, 1846
  22 km, 1899
  46 km , 1915
- Municipal Council: the administrative authorities in the settlement which was independent of Chinese government.

3) Became a Modern City
- The biggest metropolis in the Far East, 1920's-1930's
- The industrial centre of China
- The commercial centre of China
- The financial centre of China
- The cultural centre of China

PART 2: ARCHITECTURE

1) Early time after Opening: 1840's-1890's the Colonial Style

2) The Golden Age of the semi-colony (1920's-1930's)
   Beaux-Art style: copy of European Architecture
   Art-Deco: influence of the Modern Movement
   Revival of Chinese National Style
   Examples

How to Overcome Fear of Dental Visits and Maintain Good Oral Health

by

Yin Yin Go

Department of Anatomy

Abstract

Most people experience some degree of anxiety, fear, or pain when visiting the dental office. These difficulties often make the patient put off dental appointments waiting "until it hurts" before he or she will schedule an appointment. There are several ways to make patients feel confident and relaxed in the dental chair, also, to raise one's dental pain threshold. The basic step in maintaining good oral health is effective tooth brushing. Several techniques of tooth brushing are Bass technique, Roll technique, Circular scrub technique, the Charter's technique, and so on. The two most widely advocated methods of tooth brushing, the Bass and modified roll technique will be emphasized during the presentation. Dental floss is a most valuable adjunct to maintain oral hygiene, particularly in between tooth surfaces where toothbrush bristles will not readily reach. Important details about the use of dental floss will be discussed. The aim of this presentation is to help people to overcome barriers to oral health and to gain a healthy, beautiful smile.

Hong Kong's Dominant Ideology: An Examination of the June 1993 Legco Debate on the Disparity between Rich and Poor in Hong Kong

by
Tom Mitchell
Department of History

Abstract

In August of 1982 a close observer of politics in Hong Kong was thus quoted in Time Magazine: "Let's not be mealymouthed about it: China is a Leninist state in which the [Chinese Communist] Party rules. That is totally opposite to the non-ideological thinking of Hong Kong." [Emphasis mine.]

Hong Kong is, according to many of its admirers, a rare beast: a strange neutrality devoid of ideology and populated by political apathetics; a level playing field upon which its inhabitants compete freely and equitably for economic gain. "The modern exemplar of free markets and limited government," Milton Friedman has said of Hong Kong. "The best example in the present century of successful capitalism," according to a member, in 1982, of the British Parliament and the Conservative Party. These latter two are particularly powerful assertions. Each accepts first, the infinite accumulation of capital, and the insatiable consumption of commodities and resources, as legitimate human aims; and secondly, that in Hong Kong all are given "a fair chance" to so accumulate and so consume.

I will argue that Hong Kong does indeed possess and nurture a powerful ideology: a belief in the fairness of its economy, a belief that the talented and diligent are justly rewarded with riches, while the poor - being lazy and/or stupid - deserve their misery. Moreover, such beliefs have been used to justify the political privileges long enjoyed by Hong Kong's elite, and have made more difficult the task of those political activists fighting for a more representative and accountable - that is, more democratic - political order. So as to illustrate these points, I intend to bore y'all silly with an examination of a debate heard in the Legislative Council in June of last year - a debate focusing on the distribution of wealth in the territory.

The Use and Misuse of Narcotics

by

Prof. Joseph Yang

Department of Anaesthesiology

(Head of Department)

Abstract

2000 years before Christ. the Egyptians would visit the poppy field and use the plants to prepare an intoxicating beverage. In the middle ages, the opium was called "Mash-Allah" (praised be God) by the mohammedans and was a leading commodity of Oriental trade. More than any other land, China had its destinies influenced by opium. Four wars were waged on it's account.

The isolation of morphine from opium was done by Serturner in 1803. Although nature has long provided insects with syringes, the hollow needle was not invented until 1853 by an Edinburgh physician Alexander Wood. Before that, the only channel open to medicine for pain relief was by mouth. This discovery provided an instrument by which pain-killers could be introduced directly into the circulation. Poets have sung its praises. The narcotic was to "relieve" the thousand natural shocks that flesh is heir to.

The medical professionals using morphine to allay pain could proudly claim the ability to dissipate many of the woes of the flesh. Thanks to them, mankind has been largely relieved from the curse of suffering. Still, the conquest of pain brought dangers. The victorious history of pain relief with narcotics was also the history of a thousand perils. Addiction trod on the heels of narcotics. In the beginning, statisticians, accustomed to think in almost astronomical figures, paid little attention to small numbers, even when they were the numbers of those for whom suffering might be worse than death. Finally the toll of addiction to narcotics grew so high that the disasters had to be seriously weighted against the blessing of relief from pain. Many patients were then denied narcotics.

Yet chronic pain is a reality. For some, the treatment of prolonged pain with narcotics is like insulin to diabetes. Addiction is a psycho-social phenomenon which can be defined as a compulsive behaviour of someone whose sole purpose in life is to get the next dose. In this regard, physical dependence does not equate addiction.

During controversy, it is best to go back to the basic: cure sometimes, relieve often and comfort always.

Alzheimer's Disease

by

Tak Pan Wong

Department of Physiology

Abstract

Forgetfulness is common to all of us. We may forget the deadline of submitting our assignments, the names of our hall-mates and so on. However, Alzheimer's disease (AD), which begins with what appears to be simple "forgetfulness", progresses without mercy, robbing the sufferer of memory, of capacity, of humanity. The development of impairment of memory, attention, language function, visuospatial abilities, perception and judgment can be found in the course of AD. Besides, the degenerating sufferer also exerts a continuous burden to the sufferer's family and friends. Finally, death, which is due to severe mental and motor impairment of the sufferer, is followed.

AD is one of the major disorders of the elderly, ranking in importance only behind heart disease, stroke and cancer. Nowadays, AD affects about 3 million Americans. It also accounts for more than 50% of cases of dementia in adults. Moreover, some recent epidemiological studies have shown that AD is not uncommon in Chinese population. In short, it is interesting for us to have a closer look of AD. In this seminar, we will discuss the nature, causes and treatments of AD. Besides, the proportion of AD in Chinese population will be shown.

Neural Tissue Transplantation

by

Anson K.S. Cho

Department of Anatomy

Abstract

Damaged nerve fibres in central nervous system (CNS) cannot regrow or regenerate in mammals, including man. Consequently, there will be loss of neurological functions. This is because no new neurons will replace the damaged neurons in CNS. About 10 years ago, the nerve transplant technique was developed to try to overcome the above problem. In order to promote the regenerative ability of damaged fibres, peripheral nerve grafts are transplanted to various parts of brain and spinal cord . Besides, the nerve transplant technique also provides a useful model to investigate the factors that can enhance the regenerative ability of damaged CNS fibres. In addition, foetal brain transplant has been undertaken to replace the lost neurons in brain. So far, it is fair to say that neural transplantation gives hope to patients suffering from damaged CNS.

The Myth of an Export-Oriented Economy in the Pearl River Delta

by

Becky P.Y. Loo

Department of Geography and Geology

Abstract

Ever since the introduction of the Open Door Policy, the Pearl River Delta (PRD) has enjoyed very phenomenal export and economic growth. The PRD, taking advantage of the special preferential treatments offered by the central government, has managed to increase its export value by nearly tenfold over the last decade. Guangdong, where the PRD constitutes its economic core, has become the most important exporting province of the country ever since 1986. As a result, many scholars have described the region as an "export-oriented economy". And such an image has been very well received because of the common beliefs on the large influx of *sanlai yibu* in the Delta during the early 1980s, the growing significance and increasing export-orientation of *sanzi qiye* towards the late 1980s and the numerous "export commodity bases" found there.

However, these studies and beliefs, mostly based on the rapid export growth of the PRD and its status as the most important exporting area of the country, have not paid any heed to the actual export-orientation of the regional economy and, hence, cannot prove that the PRD has been a "truly" export-oriented economy. Based on the conventional theoretical knowledge and the specific local context of the People's Republic of China (PRC), the present paper attempts to re-examine the issue from the viewpoint of the PRD's local economy, at both the regional and county levels. Particular attention is given to the level of export-dependency of the regional economy and the relative importance of export in accounting for the economic growth and industrialization of the PRD. The study period is from 1981 to 1990.

After a detailed analysis of the export-orientation of the PRD, this paper concludes that the region, though having signs of increasing export-orientation, cannot be categorized "truly" as a export-oriented economy. In addition, it also shows that most of the "evidences" or "common beliefs" behind the notion of an export-oriented economy in the PRD are illusionary, if not erroneous. In the first place, phenomenal increase in the absolute value of export in an economy enjoying rapid overall economic growth, as in the PRD, does not necessarily imply that the export sector has been an important, not to mention the most dominant, sector of the local-economy. Similarly, the status

of being the chief exporting region of China does not inevitably suggest a high degree of local export-dependency. To draw the conclusion that the PRD has been an export-oriented economy on these grounds is to commit the fallacy of *non sequitur*. Moreover, the *sanlai yibu* industries in the PRD has also contributed much less to the export value and national income of the region than the "ordinary" export enterprises because *sanlai yibu* industries are only earning processing fees (*gong jiao fei*) instead of the full product value of their outputs. Also, the general impressions of high export-orientation of the *sanzi qiye* and the "export commodity bases" have been more deceptive than true because of inadequate monitoring. In fact, the rapid economic growth of the PRD in the last decade has been supported largely by the lucrative and expanding domestic market of China.

The implication of the findings of this paper is twofold. On the one hand, one finds that the export promotion strategy is no longer the only way to develop in the PRC because of the onset of world recession, the rise of international protectionism and the existence of a huge potential domestic market. On the other hand, if the PRD is to enjoy "export-oriented growth" in the future (as there are many "unique" benefits associated with export), it is high time for the government to tighten its monitoring of the *sanzi qiye*, to increase the attractiveness of Chinese products overseas and to perfect its investment environment at home.

N. B. The basic notions of this seminar are taken from a paper which I wrote in collaboration with my supervisor, Prof. C.K. Leung. The paper will be published as a chapter of the Proceedings of the ICANAS Congress: Symposium on the Pearl River Delta: Potential and Opportunities.

Direct Solids Elemental Analysis: Laser Sampling for Inductively Coupled Plasma (ICP)

by
Amy Pui King Leung
Department of Chemistry

Abstract

In principle, analytical atomic sources can be applied to the analysis of both liquid and solid samples. However, even though most chemical analysis involves solids, dissolution of the sample is needed because traditional techniques involve introduction of samples as liquids. It is of great interest to have an effective technique for the direct analysis of solids.

Laser sampling is a versatile technique for chemical analysis of solids. It offers great significance to analytical spectrometry. Time-consuming sample dissolution, possibility of contamination due to reagent impurities, loss in sensitivity due to dilution and loss of volatile elements during digestion are avoided. Solvent matrix will also be eliminated and a simpler plasma will be obtained.

To develop an experimental approach for stoichiometric and reproducible laser sampling as a means of solid analysis, a high power laser beam is focused onto the target. The laser-sampled vapor is delivered to the ICP for atomization, ionization and excitation. Analyte signal will be monitored with a multi-channel spectrometer and experimental parameters influencing the performance of this technique will be studied.

Guest Night Speeches (94-95)

English Across Cultures

by

Dr. Elaine Yee Lin Ho

Department of English, The University of Hong Kong

It is a great honour for me to be invited as speaker on Guest Night at Robert Black College, and a special pleasure. For me, tonight represents a return to a place where I spent a formative year at the start of my academic career. This was the year 1975-6 when I was Swire Scholar here at College, just starting to do research for the degree of Master of Philosophy. It was the kind of year which I am quite sure all of us here would have had experience of at some point early in our lives when a whole new world of experience opened up in front of us, when new friendships and intellectual bonds are struck, and which we now look back and remember with a mixture of loss and delight.

My subject tonight is "English Across Cultures". What I have to say is a matter of personal experience and reflection as a Hong Kong person whose association with English has been long and intimate. All through my school years, I had lived a fairly cloistered life within a traditional Chinese family headed by a patriarch, my grandfather, who had three wives and twelve children, all daughters except for one son. At home, we spoke Cantonese, the local language, but like a lot of Chinese children of my background and generation, I went to convent schools where I was taught not only to speak and write English, but where, except for Chinese history and literature, I was taught *in* English. I don't remember this bilingual access as being anything of a problem. English was never spoken at home; my grandparents and most of their female children did not speak English. My uncle, the only male child, did rather haltingly, but for grandchildren like myself, there was always a premium placed on English in decisions concerning our education.

The teachers who taught me English at school were, without exception, Chinese, and my family had no non-Chinese friends. But despite the absence of contact with native speakers of English, I managed to do quite well all through school, in English and other subjects, and was accepted to read English at this University, the University of Hong Kong. At university, my contact with English became much more immediate and more interesting. On the academic level, there were the books, great works of English Literature from Chaucer to Milton, to Dickens, to T. S. Eliot. These I not only had to read, but to learn how to talk about in an informed and critical way, to judge, to discriminate. On the social level, it was at University that I first met and

made friends with native speakers of English, from England, from the United States, from Australia, and others like Japanese exchange students with whom I could communicate only through English.

My year at Robert Black College was a year when my experience of English took a significant turn, and like a lot of formative experiences, it was very double-edged. In those days, College life had a distinctly formal air. We, other Swire Scholars and humble postgraduates, didn't exactly bow at the Master every time we passed him, but we were expected to be on our best behaviour especially at High Table dinners. And by best behaviour, I don't just mean being dressed up - that goes without saying - but to be able to converse intelligently about a variety of topics with guests, many of whom were distinguished scholars and academics from international backgrounds. It was assumed that graduates of the English Department had an edge over others because of their facility with the language, and English was, of course, the lingua franca of Robert Black College. Let me tell you that my anxiety over these recurrent dinners was nothing short of acute throughout my year at College.

Of the variety of topics I remember from that year on which I was supposed to be able to converse intelligently, fine wines had to top the list. I didn't drink because nice girls from my sort of background in those days just didn't. Next on the list came Bach and Beethoven, Verdi and Wagner. Stravinsky, I think, was still frowned upon in those days. Never mind John Cage. Let me say that nothing in my long years of education in English at school or at University had prepared me for the niceties of English in use across the High Table. I could talk about literature, I suppose, for that was what I was trained to do, but I couldn't, for example, grasp the difference between a critical analysis of a book, which was not really the thing to do at High Table, and a generally informed account of what one had read recently. One more example of my own awkwardness. After one High Table dinner it must have been one of the first - one of the stewards came in and made the following announcement: "The Lounge is now ready. Ladies please follow me." Those who were in the know got up, pushed back their chairs, and made to leave. Out of the corner of my eye, I saw the Chief Steward handing the Master a box from which he took out a long, dark, pencil-like object, sniffed at it, and the box was passed on. I followed the women trailing their long skirts up the steps to the lounge where for about an hour, we passed a box of chocolates backwards and forwards between us; some who were married talked about babies and children, while others sat looking bored, fidgeted, or like me, nodded and smiled politely all the while wondering what it was all about. Someone yawned and said loud enough for all to hear: 'I wish they would get their port and cigars over and done with, and we can all go home.'

Life in Robert Black College that year was full of bewildering and fascinating moments like this. For someone like me, it was a real eye-opener. What became clear in the course of that year were the many facets of English as a social and collective language, and my own very limited knowledge of these despite oral and written fluency. In many ways, life at Robert Black was designed precisely to socialise me into English, into its very different conduct and activity through a range of communal discourses from intellectual and academic discussion to high table chit-chat. One can hardly find a better environment for this kind of linguistic training than Robert Black College, but it is a linguistic training which is also cultural training. In the year I was Swire Scholar, the presence, then as now, of an international community of scholars protected me from the mistake of thinking that those bizarre instances of cultural importing at high-table that I talked about earlier on were typical, or even representative, of cultural contact enabled by English. The part, thankfully, did not stand for the whole.

Before entering Robert Black College, English to me was either the sober language of education or what you use in order to talk to foreigners. It was as a junior member of the international community at Robert Black that this superficial awareness of the function of English became marked by a growing intellectual curiosity about how as a language, English can be a way of bringing people together and of keeping them apart. From the friendships I have made and kept from that year, it became clearer and clearer to me that sometimes English works with established boundaries of nations and cultures, and at other times, it works actively to reshape these boundaries, or even to dismantle them. And it is in literature that I discovered the imaginative and creative extensions of my personal experience of English that could at once satisfy and activate an intellectual curiosity.

I said at the beginning that the year I spent at Robert Black was formative. My own academic and research career seems to bear this out. When I finally decided that I was staying in the University, as a teacher in the English Department, I followed the decision through by getting a Ph.D. By that time, my grandfather was long dead, but I nourish the secret hope that he would have no cause to regret his patriarchal decision many years ago that I should learn English, though I don't think that a Ph.D on seventeenth century English Radical Protestant poetry was what he had in mind.

My work now in the English Department continues to be on traditional English Literature: this year I will lecture on Shakespeare's *Coriolanus* and the sonnets of John Keats, and I have published on the rhetoric of seventeenth century English poetry and biography. But increasingly, my own teaching and research, and the literature teaching of the department itself, bring into focus

the vigour of English as the creative language of communities that are globally dispersed, transnational, and multicultural. My year at Robert Black is imprinted with the outlines of an experience that says English can be the special language of an occasion, a social class, an historical moment; but no one, no class, no place and time can claim a monopoly over it. One values certain traditional and creative achievements in English, but one does not valorize these achievements, that is to say, establish them as incontrovertible criteria by which all other literary creations are measured.

I believe that literature teaching in the Department of English has at least a two-fold purpose: first of all, to engage our students, who are mostly local, and whose contact with English outside of the academy is minimal, to engage them in thinking about English as a language with no final home, as a language that can, if they wish, belong to them as it does belong to numerous other communities. In other words, I would like our students to stake a claim on English as a measure of their claim to being citizens of a modern and international city.

Over the past five years, we have diversified our syllabuses to include literatures in English from many cultural locations. At the undergraduate level, we offer courses in both English and American literatures; we teach novels by Indian writers in English, by Eurasian and Asian-American authors, drama by Irish and Caribbean playwrights. More writers from these communities, together with others from Canada, Southeast Asia and Africa, will be taught in the literature component of an M.A. course in English Studies which has received funding from the University Grants Committee, and which we hope to begin in the next academic year, September 1995. It is no easy task to think of ways of organizing texts from diverse cultural locations into a curriculum that is both strong and challenging. At the same time, the traditional claims of English literature to being the centre, the origin, to which all other literatures in English have to refer casts a long shadow. But we have taken more than the first steps in building a curriculum that does not distance literature in English as an object of study, little related to the experience and position of our students, or simplify it as the stylish expression of universal commonplaces, or reduce it to a means to the end of language competence. Literature in English is about researching and finding those meeting places, points of contact, and possibilities of dialogue between persons, classes, nations and cultures. I hardly need to emphasize the urgency and need of such work in our own troubled times in the late twentieth century.

I happen to think that to study literature as an academic and intellectual subject (as distinct from amateur or leisure reading) does not mean the finding out of

content, or themes, or universal "truths" as an end in itself. At this level, if I can borrow the words of the poet, T. S. Eliot, most literature is about 'birth, copulation and death'. So what's the point? I said earlier on that the work of Literature teaching in the Department of English is at least twofold. The second, but by no means secondary, aspect of our work, simply put, has to do with teaching students how to read. "English across cultures" refers not only to the positions of the writers, who imagine, question, and unsettle cultural borders, but positions of readers as well, readers, who in our case, are students trying to read texts written in a foreign language. We first of all try to encourage students to think of reading, not simply as a matter of passively receiving information, but as an exploration of meaning to which they can actively contribute. The text speaks to them from a distant time and a distant place; they can respond and say this is what I think you are saying to me. In this process, the response of students can significantly vary simply because their experience of English in the past is not the same. But this act of reading cannot be complete until the students can argue the merits of their response, and judge its validity or persuasiveness in comparison to other responses from their peers, their teachers, and other literary critics.

I don't think it is the business of a literature department, or indeed, a humanities department to lay down the law on what is or is not true. We are not in the business of teaching theology or science or political dogma. It is our task, however, to process, by reasons of argument, the claims to truth. In literary criticism, these claims are often couched as judgements of artistic value and merit: this text is better than that; this author is a greater writer than the other, etc. We cannot expect our students to be able to read critically until we are ourselves critics of texts and received ideas and judgements about them. I would consider it a sad failure of responsibility on our part if we tell students to study a text because it is good without explaining why at this particular moment in time, we think it is good. Each literary text has to be continually re-tested, justified, argued for: it is this that keeps them alive. Without this crucial act of criticism, we offer the students no means by which they can engage in argument and criticism themselves, only received opinions which they can do nothing with but repeat. It is my hope and my belief that we, in the English Department, do and can do, a lot better than this.

In the English Department, we try to foster a participatory community, one in which the members are both active and interactive, and to which they can all contribute by helpful criticism. This is I think the ideal that any community can strive for, and it is in the year that I spent at Robert Black College, so long ago now, in my first experience here of an international and intellectual community, that the seeds of that ideal were first planted in my mind. For this, and for putting me onto fine wines, I thank Robert Black College.

My Experiences in the New Territories and More Recently in Discovery Bay

by

Mr. Jeremy Marriott

Hong Kong Resort Company Limited

It may be hard to keep my distinguished audience awake after such an excellent dinner, but I will try to extract something interesting from my varied experience as a District Officer in the New Territories in the 1960s and in the real estate business in Discovery Bay in the 1990s. I now am working to render myself obsolete by 1997, by which time my experience of Hong Kong will have spanned forty-three years, as sailor, civil servant and businessman or more accurately, an administrator in the private sector.

Originally conceived as a holiday resort, Discovery Bay has been developed as a residential community. Essential services like water supply are provided privately. The Government provides Police and Fire cover only. The roads are private for maintenance purposes, but public in that Road Traffic legislation and Transport Department licensing apply. The beach is private, but must be open to the public. Government rates are payable on Discovery Bay properties which, however, receive virtually nothing in return.

Things are set to change when Discovery Bay is linked via road tunnel to the rest of Hong Kong in 1997 and begins to play a key supporting role for the new airport and later the new port. Ultimately, in fairness to the people who live there, Discovery Bay must be treated like other parts of Hong Kong in the allocation of Government resources. The tunnel will also carry utilities and can solve Discovery Bay's two main inherent problems, namely total dependence on the ferry service and on a singlesource water supply.

Dealing with the Government is now very difficult and conditions entirely different from the 1960s when Government servants did not have the ICAC breathing down their necks and were not afraid to make decisions, even if they sometimes made the wrong ones. The inherent caution of civil servants has now been reinforced by 1997 anxieties and by the politicisation of Hong Kong. Civil servants have to cover their backs within Government and avoid criticism in the political arena outside. With postings every few years, the temptation to hide awkward files under the carpet for successors to find is stronger than it ever was.

The history of the New Territories' 99 years under British rule remains to be written. The British may not emerge with great credit. There were enlightened administrators, who cared deeply for the New Territories people and their way of life, but in the first sixty years little was done to improve the infrastructure or to raise living standards. Roads were built solely for military purpose or to facilitate reservoir schemes for urban Hong Kong. The railway was built to link urban Hong Kong with Canton. Fanling golf course was built for city dwellers.

During the Japanese occupation, the New Territories villagers sided with the Chinese guerillas and helped escaping British soldiers. Sometimes their resistance to the Japanese met with reprisals, as the monument near Wu Kau Tang in the Sha Tau Kok peninsula bears testimony. Afterwards the British had some trouble reestablishing their authority, particularly in Yuen Long.

The Korean War gave a boost to the mining of wolfram and iron ore in the New Territories, which was loosely controlled except where the villagers themselves were united in opposition. The related United Nations embargo on trade with China encouraged smuggling by border communities. Peng Chau in Mirs Bay did so well out of kerosene smuggling that around 1,500 people still lived there in my day and rival Christian churches were established at either end of the island.

The Hong Kong Government frustrated attempts by the New Territories villagers to realise the value of their land holdings, following the end of rice cultivation and extensive emigration to run restaurants overseas. Shatin started to be developed as a new town only because the Jockey Club wanted to build a bigger and better racecourse there. The land exchange entitlements known as "Letter B" were devised to save the Government from having to pay cash for private land resumed for development. The small house policy, which entitles every male New Territories villager to build a house without submitting building plans, was a small concession, but this has been exploited by developers and has resulted in a rash of unsightly housing in Sai Kung and elsewhere.

Most accessible parts of the New Territories are now a sorry mess, partly due to half-hearted control policies, unevenly applied, but mainly due to the Government's lack of nerve when challenged in the courts in the 1970s about the permitted uses of agricultural land. Belated efforts to redress the situation through Planning Regulations seem ill-conceived and unlikely to succeed. The designation of large tracts of inaccessible and depopulated land as Country Parks is commendable though even this was in part motivated by a desire to restrict development in water catchment areas.

To relieve this somewhat gloomy picture, I hope that the history of the New Territories, when it comes to be written, will include some light-hearted anecdotes, of the type so amusingly narrated by Austin Coates, so as to reflect the guile and humour of the people and the sheer fun of living and working in the New Territories. The material lives of the people have changed beyond recognition but I am sure that their independent spirit and strong sense of identity will continue to challenge the authority of the new SAR Government after 1997.

New Public Management and the University

by

Prof. I. Scott

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It is always a great pleasure to attend a College guest night and I am delighted that the Master has invited me to speak here this evening. From previous experience, I know that what faces the speaker is a slightly daunting task. The excellence of the dinner and wine is a hard act to follow. I will try to keep my presentation brief, but I hope that it may be of some interest because it is a subject which concerns us all, the state of the university.

I shall soon be leaving this university and that change has given me cause for pause and reflection about this institution. I am not, however, nostalgic for the good old days, if that is what they were. The University of Hong Kong is generally a much better university today than when I joined it in 1976. It is better equipped, more professional and offers a far broader variety of courses. It has many more research postgraduates who are the lifeblood of a vibrant department and a scholarly community. It is far better connected to, and integrated with, universities in the wider world.

But it can hardly have escaped the attention of anyone working in a tertiary institution that the last two or three years have seen the administrative workload increase expedientially, far beyond, at least in my view, the necessary increases resulting from more students and more programmes. I recently chaired a meeting of Deans and flippantly advised them from my own experience not to resign because the university would immediately double their administrative workload. 'It's no joke' said one of the Deans to general agreement 'I have people in my Faculty who believe that the university has taken their academic careers away from them by increasing their administrative loads'.

Let me give you another example of our increasing administrative load. In a recent speech, the Deputy Vice Chancellor said that the university spent 46 per cent of its budget on academic staff and 35 per cent on administrative staff. He drew the conclusion from this that academic staff were our most valuable asset. My question was rather different. Why did we pay so much for non-academic staff if academic staff were our most valuable asset? I hasten to say that I have every reason to believe that non-academic staff are working very

hard. I could scarcely say anything else with so many senior administrators sitting in the audience. But it has, quite honestly, been my experience that the administrative staff of this university work very hard. My question, however, remains. Why do we need so many? And why are all the senior administrators and academics of this university working at such a frenetic pace?

If you ask that question in the Senior Common Room, the answer will generally be that, whether out of malevolence or madness, the villain is the UPGC. In efforts to squeeze more productivity out of tertiary institutions, it is causing all of us to run around like chickens with our heads cut off. We need more administrators because the UPGC wants us to run more programmes, teach more students, ensure better quality teaching and research without increasing our staff numbers. There is some truth in this picture, but I want to suggest that it also contains some misunderstanding of the origins of these policies. You may recall Keynes' famous remark

> "Practical men who believe themselves to be quite exempt from any intellectual influences are usually the slave of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back.... the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest."

The UPGC did not invent the current management practices which it seeks to impose on tertiary institutions. It is merely recycling ideas which have been abroad in the discipline of public administration for over a decade. It should be said that the doctrines of new public management, to which the UPGC subscribes, are by no means universally agreed either by practitioners or academics. But if you follow blindly in the manner of Keynes' practical men or madmen in authority, as the UPGC does, you are unlikely to be aware of the nuances within the doctrine, still less of the central criticisms of the argument.

New public management is a deceptively simple set of prescriptions for the problems which ail public bodies. It starts from a proposition with which we can all agree: that the public sector, at least as far as it was constituted in the 80s, was too expensive. That expenditure consequently had to be reduced. And the best way to reduce expenditure was to open up the public sector to market forces. This rather simplistic notion has had profound implications. The British, New Zealand, Australian and Canadian bureaucracies have been radically affected by new public management. The American government is currently seeking to implement the Gore Report which would change the composition of the Federal bureaucracy very dramatically. The World Bank

and the IMF have adopted the basic tenets of new public management and have sought to apply them to Third World countries. Their consultants have actively sought to introduce its ideas in Eastern Europe and in the former Soviet Union. It can be said that new public management represents something of a global revolution, something that comes together in this book Reinventing Government written by a journalist and middle level manager, although it might well have been written by missionaries. It is a book which has influenced American Presidents and British Prime Ministers. It is, in my view, dangerously misleading, but it should enjoy a place of honour somewhere close to every Vice-Chancellor's shredder. Within it are summarized the principal tenets of new public management, which are listed on this viewfoil.

NEW PUBLIC MANAGEMENT

- 'Value for money', cost-cutting, cost improvements
- Performance indicators, measurement
- Reporting and accountability
- Disaggregation of public bureaucracies into agencies operating on a user-pay basis
- Emphasis on outputs, results
- Private sector management styles
- Contracting out, monetary incentives for performance

In this summary form, none of these proposals are particularly objectionable. They only become objectionable if they are applied to the public sector without regard to the notion of market failure, the idea that there are certain goods and services which are valued, sometimes highly valued, but which private investors may not see profit in and ordinary citizens may not be able to afford. Universities are prime examples. And within universities there are subjects, often languages or obscure areas of history or culture, which do not have sufficient demand to sustain them, in purely economic terms. I have heard university administrators and some senior academics say that departments which have inadequate demand should go to the wall. This seems to me akin to saying that zoos should not take care of endangered species because all that people come to see are the monkeys. Knowledge must be preserved; demand and supply measure something, not everything.

In December last year, my department invited a number of leading academics and practitioners to a conference to discuss public sector reform. We did not intend it to be a critical look at new public management, but that is what, in part, it turned out to be. Subsequently, we turned the proceedings into this book, Public Sector Reform: Critical Issues and Perspectives. Dr Ian Thynne, my co-editor, is here this evening and I would like to thank him for all the hard work he put in to make the book possible. I recall that, when I was writing my chapter, I remarked to him that I scarcely needed to do any research because the raw material was in my in-tray, kindly supplied by the university or the UPGC.

Let me try to distill some of the criticisms contained in the book as far as they affect new public management and the university.

NEW PUBLIC MANAGEMENT IN THE UNIVERSITY: THREE CRITICISMS

- Performance indicators
- Reporting
- Human relations

Performance indicators Performance indicators attempt to measure input or output, preferably the latter under new public management, and then link this to the funding process. They are notoriously unreliable and, worse, can significantly distort the objectives of an organization. Let me give you an example. A few years back our Department of Health used to fund hospitals on the basis of the bed occupancy rate, that is, the more beds you had and the more patients you had in those beds, the more funding you received. It did not take doctors long to discover that it paid to keep patients in beds, including many who would have been better off at home. The objectives of health care were distorted by the performance indicator.

The UPGC has recently developed a performance indicator: the refereed academic journal. Publication in one of these journals is now regarded as superior to books or to chapters in edited collections. My own view is that to adopt such an indicator is as pernicious as it is wrong-headed. It has already sent the wrong message to some departments (not in this university, as far as I

know), who have been divided into active researches and others. They have also spent valuable time trying to accomplish the futile task of ranking journals. It is a futile task because, as we all know, publication in a refereed journal is not an automatic guarantee of quality. Good journals publish poor articles sometimes and vice-versa. In addition, why should we restrict ourselves to internationally-known journals? We may want to encourage local journals. We may even want to encourage local debate. If we restrict ourselves to refereed journals in the social sciences, the only people who will read our work will be other academics and a few students who are required to read them. This at a time when the Hong Kong community, above all else, needs to consider its future. That is why I said this was a pernicious indicator: it cuts the social science academic off from important debates by valuing one type of research activity, which is tied to funding, above others.

Reporting There is a story about the Quarter-Master General and his deputy in the Indian Civil Service. Both were working at full stretch when it came time for the deputy to take extended length. The Quarter-Master General was appalled by the thought that his workload would double. In fact, as it turned out, it halved. They had been making work for each other.

We make a lot of work for each other in this university. Heads of department are called upon to provide the same information on research, for example, to different parts of the university. No doubt all this information is required - although I doubt if it is all read. But I think also that there is some confusion of purpose here. The basic idea, which I support, is one of accountability. But accountability should not be confused with reporting. Nor should it be used as a means of enforcing management control which seems to be one of the current trends, a particularly dangerous trend when you are dealing with supposedly autonomous units such as universities.

I have little doubt that the UPGC's coming teaching quality audit will be as meaningless as the research assessment exercise. It will waste a great deal of valuable time with no tangible benefits. In passing, I should say that I believe that quality control is the university's business, not the UPGC's. If it fails that test, then its reputation will suffer. It is ultimately accountable to the bar of public opinion, not to an opaque committee of quasi-governmental body.

Human Relations When I was a Head of Department I noticed that one of the effects that new public management practices had upon me was to make me less sensitive to the human dimension in the university. When I began I thought of students as people. After a year or so in the job I thought of them of fte's. As more students crowd into our classrooms - in the name of cost

effectiveness and greater productivity - we do tend to lose that human dimension, which was the greatest strength of the University of Hong Kong in the 1970s. We also engage unwittingly in the destruction of the tutorial system, one of the great strengths of our tradition of education and one which theoretically brings staff and students closer together. In our university today, students are most likely to be taught by post-graduates with numbers running per tutorial in some departments into the twenties and thirties. I rather like, in this respect, the system in some Australian universities where the measurement of teaching load rewards tutorial teaching and not lectures which it is assumed everyone will do anyway. It is, it should be said, not simply universities who are affected by this; morale in almost every public service in the world has been adversely affected by new public management practices.

I should like to end by quoting from a recent speech by Malcolm Bradbury, the novelist and Professor of American Studies at the University of East Anglia, reflecting on the state of British universities after a decade or so of new public management.

> "I have always thought that what happens to universities is a metaphor for the larger state. That is why we need a good, well-funded, intellectually confident university system, open yet defensive of its ideals and standards, not one that simply services the marketplace or follows the cultural drift. So I thought when I went into universities. So I shall go on thinking when I leave the university ..."

Precisely, if we fail to protect ourselves from the doctrines of new public management, we are liable to find, in Bradbury's words that "higher education becomes yet another product, not a serious training in intellectual adventure, maturity and rigour." Thank you.

The Head of the Dragon: the Pudong New Area and Shanghai's Urban Development

by

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"The Yangzi River is like a great dragon. The head of the dragon is Pudong. The dragon's body is Jiangsu Province. If the head moves, the body must move with it".

Chen Wanyou, Governor of Jangsu.

In April 1990, Premier Li Peng officially sanctioned the proposed development of the "Pudong New Area" (*Pudong Xinchu* 浦東新區) in the most advanced economic centre of the country - the Shanghai municipality. The plan, grand in conception and bold in design, will be the linchpin in revitalizing Shanghai proper, and in anchoring the future development of the Jiangsu, Zhejiang, Anhui and Jiangxi provinces.

Pudong, described recently by the Amercian engineer, Lin Tongyan as a "treasure land unique in the world" comprises a 350 square kilometre triangular land mass between the east bank of the Huangpu River, Shanghai's main water arterial, and the East China Sea. The Huangpu River, traversing the heart of Shanghai for 24 miles in a generally north-to-south direction, sinuous with five main bends before it joins the Yangzi River at Wusong, divides Shanghai into two geographically distict regions known as Pudong "east of the Huangpu" and Puxi "west of the Huangpu". The river, forming a natural and safe anchorage, served Shanghai and China well as a harbour for inland, coastal and oceanic shipping judging by the volume of shipping tonnage that cleared the port (42.9% of the national total by 1937). In the absence of adequate cross-river connections, and despite the fact the Pudong was estimated to exceed Shanghai by more than 130% in valuable shipping frontage, Pudong has historically remained comparatively undeveloped though it lies across river within 2000 feet of Shanghai's city centre.

The plan (in the words of its boosters) represents the final materialization of the "long cherished scheme of Pudong development" which further demonstrates the determination of the nation to open a wider door to the outside world". It also represents the "dream of the people who cherished with lofty ideals to build the country into a modern nation."

Indeed, dreams and schemes launched the original prototype of the "Pudong New Area" approximately seventy years ago. It was just such a dream that prompted Sun Yarsen to declare his programme of developing the "Great Port of Pudong" (*Pudong da gang* 浦東大港) as one expedient in the national reconstruction of China (*Guojia jianshe* 國家建設). And as Sun Yatsen well knew, every politician needs a programme.

Although in Sun's view Shanghai was "ossifying", he was not unappreciative of its many merits if redevelopment went forward. Building on the 11,000,000 tael harbour improvements made by the Huangpu Conservancy as of 1905, in keeping with the silting of the Yangzi and Huangpu rivers at bay, sun's scheme also suggested one solution to the thorny problem of the foreign domination of Shanghai: rebuild the port at Pudong.

Since the founding of the People's Republic of China, immense energies have been expended in planning the roles of cities despite periodic ideological campaigns and policies designed to weaken them. Shanghai, by virtue of its status achieved over a scant 150 years, as China's premier industrial and financial centre, as well as the locus of the country's most influential political and intellectual activity, has been foremost amongst them. It has variously been perceived as either a negative model of potential development due to its "unplanned" growth under foreign influence from 1842-1945 (including the Japanese occupation of the city), and the failure of the purportedly corrupt Guomindang to implement the "Greater Shanghai Plan"; or subsequently, as a model of a socialist city, that the rest of China's metropolises have been exhorted to emulate. Nevertheless, since 1949, there has been little appreciation that a more continuous course of urban planning and development coping with the problems of metropolitan growth have marked Shanghai's rise to preeminence.

Barring the discovery of a formula for economic prosperity, history must, for the most part, inform our understanding of the potentialities of plans, such as the Pudong New Area, for achieving the often expressed goal of the "reconstruction of the nation" or modernization. The question of national unification in the face of imperialism is no longer an issue with the conclusion of the Joint Declaration of 1984 over Hong Kong and the agreement over Macao, the last two surviving colonial outposts. As we have seen, this issue was a significant factor in the planning of Shanghai's future, whether in Sun's scheme for the "Great Port of Pudong", or by the Guomindang's "Greater Shanghai Plan" in the pre-war period. Shanghai's growth as a product of the world capitalist economy also affected the planning of its future in the post-1949 period with policies designed to expunge its 'imperialist' past by diminishing its economic hegemony and containing its growth.

But the question of national reconstruction has not fared so well. In this aspect, the continuity with past efforts in terms of the reprofiling of cities in the agenda of national development is most revealing. The Pudong project shares with its predecessors, a recognition (suspended during the 1950-1978 period) that national economic development and urbanisation are inextricably linked, and that great cities (now termed *zhongdian chengshi* or 'key-point' cities) are the arenas where the expansion of economic life takes place. If imperialism had complicated Shanghai's relations with the international economy, there was never and doubt in the minds of the pre-1949 planners that Shanghai's continued viability not only depended on international investment, but also was absolutely essential to China's national development, and they planned accordingly. Since 1978, the move towards market "socialism" and a transnational economy and the understanding of the unavoidable consequences of such a move to the socialist system, have not deterred the newly converted. Deng Xiaoping and his more pragmatic colleagues have recognized the need for a more open policy, particularly in relation to the international community. Some more cynical observers have mistakenly viewed the opening of Pudong, given its timing, as a political ploy to recoup losses due to the withdrawal of foreign investment suffered in the wake of the 4 June 1989 crackdown in Tiananmen Square. However, such speculations ignor the fact that a more continuous course of urban planning has punctuated Shanghai's history and the development of Pudong as well as its impending fate.

Deng Xiaoping also challenged his cohorts to see the development of Pudong as an opportunity to "libérate our thinking" and not to be "straitjacketed by predetermined ideas". In January and February 1992, he carried this bod message to Shanghai. Subsequent to his visit, the current Mayor of Shanghai, Huang Ju, purportedly stressed instead the need to "guard against empty words and to be realistic'. Whatever the political manoeuverings and alignments as evidenced by the Mayor's more cautious rhetoirc, the call for fresh local initiatives in the cause of economic reform was heeded. In April 1992, a conference of Shanghai specialists was held with the intention to "speed-up" the opening of Pudong. In their view, this was their "last chance" to create a modernized Shanghai, by capitalizing on the land and human talent in the area; coordinating on an equal basis the development of Pudong and Puxi; eliminating Shanghai's "fossilized" bureaucracy; allowing industries to develop according to market forces, as well as banishing old industries to the Changjiang region; all with the added result of bringing into being a "socialist Hong Kong"!. Rhetoric aside, this last statement was a subtle reminder that as early as 1958, Shanghai's volume of foreign trade was overtaken by the then insignificant Hong Kong due to national policies set in motion since 1949. In the following decades, Hong Kong's spectacular growth as well as the rise of

the other "East Asian Dragons" was due to their reliance on the international market and foreign investment - powerful tools for development. Eschewing such a path to development for almost forty years has meant that restoring Shanghai's economic primacy will be difficult. In 1997, Hong Kong as a "Special Administrative Region" will be pressed into the reticulation of Chinese cities, and will enjoy the advantage of retaining its "capitalist system" unchanged for fifty years as well as autonomy in local decision making.

If the spectre of keen competition from the Hong Kong SAR perturbs the minds of Shanghai's specialists, less exceptional sources of competition have challenged these local initiatives. At the same time as the Shanghai conference, twenty-three mayors of Yangzi coastal cities demanded from the central government the same special privileges that apply in Pudong. However, they requested that the central government assume responsibility for coordinating development in the entire region (especially Pudong) by setting up a committee composed of provincial representatives "shanghai" for "local" when one speaks of autonomy. The historic torque generated by Shanghai's inner political necessities and its relationship to surrounding polities and the state continues to prove vexatious.

Yet, the urgency behind such pronouncements must be viewed from the fact that the dragon now has a 'tail'. On 3 April 1992, the National People's Congress approved the opening of the Yangzi River (Three Gorges) Dam Project, dwarfing even the Pudong New Area in scale and unprecedented in the controversy it has inspired. A total investment of RMB $1,000 billion will be needed over a twenty-year-period for the project and over ten million people will be relocated, affecting seven provinces. Shanghai's Pudong New Area is the anchor upon which the development of this imposing project depends. The broad priorities have been clearly enunciated by the state. If they prove acceptable, the selection of lesser priorities will be critical, to urban economic development, let alone "national reconstruction".

This paper investigates the historical roots of the Pudong New Area as one aspect in the problems of national reconstruction and metropolitan growth that has absorbed the energies of successive Chinese regimes as they struggled for greater measures of modernization. Further, it highlights in this case what was a more continuous course of metropolitan planning and development than has previously been appreciated. It helps to place Shanghai and the Pudong New Area more accurately within China's substantial range of urban experience and explores the ramifications of planning incentives and processes that will determine to a great exstent, the success or failure of China's commitment to a more open and flexible relationship with the rest of the world.

A Drop in the Ocean : is Dilution Really the Solution to Pollution?

by

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The need for a comprehensive sewage treatment system in Hong Kong has long been recognized by all those whose interests lie in the marine environment and its future. As far back as 1972 I wrote a series of articles/ letters pointing out what I saw as the approaching problems of using Victoria Harbour as a pit into which we could flush our wastes untreated. This was my very first "Close Encounter with the Government Mind" and the reply from the then Director of Public Works was, and I quote, "Models of harbour flow patterns indicate that dispersion is such that there is no likelihood of pollution in Victoria Harbour resulting from sewage discharges".

I could have ended my talk there a few years ago and said 'So, what's changed?' because even in the late 80's and early 90's this was the typical response. However, suddenly, the most dangerous maxim ever invented (or perhaps I should say engineered!) that "Dilution is the solution to pollution" was finally challenged by the Hong Kong Government itself. The EPD Annual Report on Marine Water Quality for 1992 stated "The water quality of Victoria Harbour has steadily declined since 1972" [note that date!!] "The quality is now declining at an alarming rate." The Director of that Department stated that "Large parts of the harbour could become as polluted as Kai Tak Nullah if the proposed Sewage Strategy is not put into effect before PADS."

The sewage from more than 4 million people enters Victoria Harbour untreated. Put into stark figures, this means that 1.5 million cubic metres of sewage effluent goes into Victoria Harbour daily! This load is reflected in peak bacterial loadings on the Harbour of 100,000 or more per 100mL and average values ranging from 1,000 to over 5,000 per 100mL. At our bathing beaches to the south of Hong Kong Island - which are amongst our cleanest beaches - levels as high as 26,000 have been found.

These levels are high! Indeed they are equivalent to bathing in barely diluted secondary treated sewage effluent! Not a nice thought, and "going through the motions" was never more aptly used to describe any activity!

Worse than the aesthetics of this, however, is the associated disease risk. Minor diseases that are continually present in the human population and passed on via the so-called faecal-oral route include infections of the ear, nose, throat,

eyes, skin and gastrointestinal tract. 10 - 20 swimmers per 1,000 pick up such infections at one third of Hong Kong's beaches (the ones ranked as poor or very poor).

However, of greater potential danger are the more serious diseases which can be spread by the faecal-oral route in epidemic proportions once they enter a population, i.e. cholera, typhoid, dysentery, hepatitis A, septicaemia, meningoencephalitis.

Also of concern are the metals which are discharged with sewage and which are building up in marine sediments. If these become bio-available and enter the food chains, then problems can arise such as those already recorded in Japan i.e. Minimata disease (from mercury) and ita ita (from cadmium).

The presence of inorganic nitrogen and phosphorus causes nutrient enrichment (eutrophication) of the water and leads to red tides amongst other problems.

Fishermen's organizations have already noted the drop in their catches related to polluted waters and the Hong Kong Tourist Association has warned that tourism could be hit by further deterioration in water quality, particularly in Victoria Harbour.

To face the problem, Government came up with the HK$12 billion Strategic Sewage Disposal Scheme (SSDS). This involved collecting sewage from Kowloon and taking it to Stonecutter's Island for primary lime treatment, mainly to reduce the metal content, but also the organic load and the bacterial content. This would then meet with the primary treated sewage from Hong Kong Island at Mount Davis and the whole lot would be sent down a long pipe to the Lema Channel. The sludge from primary treatment was also to be dumped to the south-east of Hong Kong. In other words the "dilution is the solution to pollution" approach again!

Initially, until the 28km pipe was constructed, the Stonecutter's Island discharge was to be released into Victoria Harbour! Stuart Reed's comments about the whole of Victoria Harbour becoming like Kai Tak Nullah could be prophetic! And to his comments could be added "The pong's not over, but the malodour lingers on".

Piping liquid effluent after <u>minimal</u> treatment and also dumping sewage sludge into the relatively shallow waters of the South China Sea is not sewage <u>treatment</u>, it is but a short term <u>disposal</u> option. As a PRC official put it so well "how can you expect to use our waters as your toilet bowl?" Pollution export is

not on! Is this a growth in exports of which Hong Kong could be proud? Furthermore, many such schemes have seen the wash-back of the effluent to nearby shores (a nasty variation of getting your own back), which clearly demonstrates that dilution is not the solution to pollution.

A great deal of controversy has centred on the SSDS as you are probably aware. Some of it political in relation to 1997 and the PRC's role in the scheme before then, but other generated mainly by local academics and others in the waste management business. Two aspects have particularly given concern:

1. The pipeline
   (a) because of its pipe-end in Chinese waters and
   (b) because of the lack of information on possible ecological damage;

2. Using lime in primary treatment
   (a) because of its effects on marine life and
   (b) because of the enormous amount of sludge it generates and which has to be dumped.

Consultants were appointed as a result of the criticism, but were only asked to look for possible alternatives to the pipeline. A group of three experts (1 American, 1 Chinese and 1 Dane) were also appointed to "watch over" the consultants. These two groups decided, however, that answers to other questions were also necessary and so addressed the questions of using lime, of the need for disinfection, etc.

Their report has been with Government for consideration over the past few months (and subsequent to this speech went to public consultation in the middle of May). The favoured option appears to be that chemically enhanced treatment using ferric chloride together with either ultraviolet radiation or chlorination for both Hong Rong and Kowloon sewage at Stonecutter's Island followed by discharge into Hong Kong waters (possibly off Lamma Island) would be acceptable. However space should be reserved for secondary biological treatment if this appears to be necessary later.

Well at least we have progressed beyond attempting to rely totally on the oceans to handle the organic matter and bacterial loads. It is a pity we could not have gone further, or at least given the appearance of being willing to go further in reducing the nutrient load on the marine environment.

Most scientists involved in Hong Kong environmental issues agree that secondary treatment should be used to reduce not only the organic load and bacterial content, but also the inorganic nutrient load as well, in order to achieve even better water quality standards and to reduce the red tide problem. Admittedly our nutrient load into the Pearl River flow might be "a drop in the ocean", but the message that Hong Kong would be willing to cooperate with China in moves to clean up the Pearl River Delta, and that we would be willing to treat our wastes accordingly, would have been a more positive step forward.

Recent news from the US and UK has given me heart - studies have revealed that lower sperm counts could be due to marine pollution!; sex hormones in sewage have been shown to cause fish to change sex; and finally, female hormones in sewage entering the River Thames are so strong that, during the summer, tap water can give a positive result in pregnancy tests.

If the ecologists' warnings of the dire risks of sewage pollution and the need for proper treatment for environmental reasons continue to be ignored, perhaps the threats of sterility, transsexuality and unwanted pregnancy should be enough to make us all want to reduce the pollution of our marine waters and agree that dilution is not the solution to pollution.

What is Your Research Degree (and is It Really Worth It?)

by

Prof. Brian Weatherhead

School of Research Studies, The University of Hong Kong

Not everyone understands the origins of the research degrees of Master and Doctor, nor have they necessarily thought through the place of these degrees in modern society: do they meet the needs of candidates, the universities and employers?

In mediaeval English universities the Master's degree (MA = *Magister Artium*) was originally the only qualification awarded and signified entry into the teaching fraternity and hence membership of the university. Gradually some of these Masters of Arts began to engage in further specialized studies in the 'superior' faculties of theology, law and medicine, which were above the 'inferior' faculty of arts, and which led to higher, doctoral, degrees (the term 'doctor' deriving from the Latin *docere*, to teach). At the same time the Bachelor's degree gradually began to be introduced as a step towards the mastership and the MA eventually became little more than a confirmation of the award of a Bachelor's degree, although the MA was still the only route to formal membership of the university.

Thus, in 19th century Britain neither Doctor's nor Master's degrees were in any way equivalent to research degrees as we now know them. In Germany the situation was very different. Students arrived at university with the *Arbitur-* a matriculation qualification gained after nine years study to a level which was practically equivalent to the English BA of the time. The German students' studies at university were therefore at a 'postgraduate' level then unknown in England. The 'inferior' arts faculty was transformed into a faculty of philosophy standing alongside, but far exceeding in student numbers, the 'superior' professional faculties of law, medicine and theology. The Master's degree thereby became incorporated into a new 'doctorate of philosophy' (*Philosophiae doctor*, PhD) gained by the successful examination and public defence of a thesis presented some 2-3 years after matriculation.

Many holders of the English BA were attracted to and accepted for doctoral study in German universities, especially scientists. However, the British studying in Germany became outnumbered by Americans, since the PhD had become a prerequisite for an American college teacher, and this eventually led American institutions to institute their own PhD degree; Yale was the first to do so in 1861.

The pressure on British universities to introduce the PhD was "not so much to entice British students way from Germany, but, ironically, to divert to Britain the continuing stream of young American scholars to that country."[1]. In the absence of a 'lower doctorate' (lower that is than the existing higher doctorates of DSc, DLitt, etc. which had been available for award following university reforms in the middle of the 19th century) British universities were only able to offer North Americans, and scholars from the Colonies, another Bachelor's or, at most, a Master's degree.

In 1917, after more than fifty years of debate, a United Kingdom Universities Conference was convened which generally supported the idea of a lower doctorate. The decision was not unanimous; the concept of a PhD with its German connotations was not universally accepted, especially at a time when Britain and Germany were at war: some would have preferred the title 'Doctor of the University'.

In fact, the University of Oxford became the first British institution to confer a PhD (actually a DPhil as that university still designates this degree). It passed a special decree on December 10, 1917, to enable Mr. Ladsham Sarup of Balliol College to supplicate for the degree in 1919. Within seven years, 774 PhDs had been awarded in Britain. Similar changes at the University of Hong Kong took a little longer since the first PhD was awarded only in 1963 and the first MPhil in 1972.

However, establishing and regulating degrees is easier than defining them. What is the principal difference between an MPhil and a PhD? Hattie and Myhill[2] suggest that:

> *A Masters degree implies that a student can* ***master*** *some content area*
> *... whereas a doctoral degree implies that a student can* ***doctor*** *the area.*

Note that 'doctor' is not used here in the same sense of falsification and the above quotation is a reworking of the dictum that "a master's degree is a licence to practise ... a doctor's degree is a licence to teach ... in a university as a member of a faculty."[3]

The MPhil in Hong Kong is an interesting phenomenon due to its popularity; it is rarely a mark of failure as is sometimes the case in North America. The reasons for its popularity have never been investigated; most explanations are merely anecdotal. This would itself make a good subject for a research degree.

Much of what needs to be said therefore concerns the PhD, where we can at least find some international points of reference:

> *One underlying issue in the matter of tackling doctoral work is the relative absence of clear and distinct boundaries. In particular, it is difficult to pin down what are reasonable expectations of space and time, the amount of input required, the demands of examiners and the concept of standards. All these nebulous questions converge to test the resilience of the doctoral student during the final phase of his or her degree programme.*
>
> *Becher, T., Henkel, M., and Kogan, M. 1994. Graduate Education in Britain..*[4]

The same is probably true of MPhil work too!

Without the provision of clear, unambiguous guidance in its regulations and procedures no University will be certain of the obligations it assumes in the implied contract it makes with research students, perhaps exposing them to intellectual, emotional and financial burdens that they may be unable to meet, nor will a University be able to refute or deflect criticism that the time its research students take from registration to thesis submission is too long - criticism which is common elsewhere in the world and not unheard in Hong Kong.

What then are some of the variables which affect work for research degrees and how do they affect research degrees at HKU?

The Duration of Study: *Do theses in HKU take too long to complete?*

In this University the minimum periods of study for MPhil and PhD degrees are defined as twenty-four months (thirty-six months part-time) and thirty-six months (forty-eight months part-time) respectively. The term 'minimum period' refers to the shortest period which must normally elapse before a thesis may be submitted for examination. They should therefore reflect the expectations that the University has of its theses, especially since our postgraduate studentships are only awarded during these minimum periods of study. However, setting minimum periods of study and periods of stipendiary funding for research students is not perhaps enough in defining our expectations. We could note the policy at the University of Oxford.

> *Attention has been drawn in this, as in other studies, to the redefinition by Oxford University of the general criterion for an acceptable doctoral thesis: what could reasonably be expected from 'a diligent and competent student after three or at most four years of full time study'.*
>
> *Becher et al. 1994* [5]

What is good enough for Oxford could be good enough for HKU! If our completion times are too long then either the university is providing too short a period of financial support, or the minimum periods are set too short, or candidates (and/or their supervisors) are too ambitious in the scope of their work, or our students are insufficiently qualified or diligent!

The Length of Thesis: *Are theses at HKU too long?*

Perhaps surprisingly, HKU gives no formal guidance on the length that it expects of its theses. At the Australian National University for example, there are clear rules governing the length of theses. PhD theses should not exceed 100,000 words and Master's theses by research have a limit of 60,000 words unless specific approval is given for these to be exceeded. The rules also include conventions for calculating thesis length based upon the average word content of twenty pages of representative multiplied by the number of pages of text (but excluding footnotes, tables, figures, maps and appendices). Restrictions such as these are not uncommon internationally. At HKU there is no such guidance and therefore, not surprisingly we find some theses of inordinate length and evidence that many MPhil theses are not markedly shorter than those submitted for a PhDs. Is this really defensible?

The Purpose of Study: *Do we have a clear view as to the purpose of research degrees?*

There is a general debate worldwide about the purpose of research degrees which spans institutions and disciplines. Much of this debate relates to the PhD and can be succinctly summarised in the question "Are research degrees primarily a training in research methods or an original contribution to scholarship or knowledge?"

To argue that it must be both a training and an original contribution to knowledge may place too much of a burden on the candidate. I believe that this is a debate that is yet to take place in HKU (or even in Hong Kong in general) and is crucial to the development of our educational policy in this regard. Certainly debates on the length of the PhD, whether it should be three or four years (or more) must address this problem. Do we really need an extra year (or

more) of the same or should the extra year provide something different, something extra, something currently missing?

The Quality of the Work: *Are our quality assurance mechanisms adequate?*

In HKU the quality of the thesis itself is assured by our external examiner system which some, including me, would argue is, inherently at least, superior to the North American system. Can we be equally confident about other aspects of candidature? Supervision, diligence, examinations, education? Moreover, we should also be clear that the PhD should be " a trial run in scholarship and not a monumental achievement ... the beginning of one's scholarly work, not its culmination."[6]

The Educational Objectives: *Do we have sufficiently clear educational objectives?*

Not all our MPhil and PhD graduates seek a career in academy: for many the subject of their research project may remain an abiding interest, but its content often has limited, professional application, and its detailed content, but hopefully not its training in intellectual rigour, becomes obsolete as time passes. In 1993, the Advisory Board for Research Councils in the United Kingdom published a discussion document on the nature of the PhD giving advice as follows:

> *There should be a wider range of graduate training opportunities to meet the strategic needs of the economy and society. The qualifications gained should place more emphasis on: the application of existing knowledge; project management skills; communication skills; and team work. The objectives of these schemes should be to service more effectively the demand from individuals for a diversity of career paths, and from labour markets for very highly qualified manpower.*

I too am firmly of the view that the best research degrees must embrace an education in more than just the narrow investigation in depth of the research project. Indeed much of the efforts of the Research School at the University of Hong Kong are in precisely this direction.

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College Seminars (94-95)

An Introduction to Seminar Presentation

by
Ina M. Bercinskas
Applied Linguist

Abstract

The key to effective communication is exactly that - communication. Having your say in front of other people is a powerful yet simple way of communicating and much easier than most people think. A seminar is no more than a 'formalised' speech act conducted in front of a group. Indeed, the word 'communication' and similar words such as 'community' and 'communion' all have Latin origins describing the idea of 'common-ness', the result of sharing ideas or reaching a common agreement. Realistically then, your intended audience may not share the same discipline or field, but they do share a commonality of purpose - the desire to listen and attend to information.

A well-organised seminar has three phases:

- the introduction - what is to be achieved or covered;
- the body - facts, with logical persuasion;
- the ending - summary.

This introduction therefore, will cover the main elements in the seminar process: planning and preparing your speaking objectives; analysing your audience; organising the shape and structure; using or not using visual aids & handouts; selecting an appropriate style; and presenting the talk (speaking techniques).

Physiology : The Cornerstone in Medicine

by

Daniel Kwasi Amoako

Department of Physiology

Abstract

Physiology constitutes the foundation of all medical sciences. The proper understanding of physiologic concepts in living organisms is essential in knowing what medicine is all about. Most medical institutions, if not all, pay particular attention to the teaching of physiology courses and so does the University of Hong Kong. There are many other departments under the faculty of medicine. However, the department of physiology is a cornerstone to both the Faculty of Medicine and the University as a whole in some aspects.

The responsibilities of this department at the Hong Kong University do not end on the teaching of undergraduate medical courses, neither on the postgraduate research studies. It has to produce administrators for the university; there is enough evidence to show that four of the department heads served as deans for her faculty and one became a vice chancellor for the university. Therefore, the importance of physiology extends from the understanding of its concepts, research abilities to administrative responsibilities as well.

The purpose of this presentation is therefore, to elaborate on some of the merits the department of physiology; not for students alone, nor only for the university but also for the Asian sub-region and the international community as a whole.

Regional Organization and Conflict Resolution : The Case of the Association of Southeast Asian Nation (ASEAN)

by

Mely Caballero-Anthony

Department of Politics & Public Administration

Abstract

Established in 1967 amidst an environment characterised by intra-regional tensions and mistrusts, the Association of Southeast Asian Nations (ASEAN) has been cited as one of the more successful examples of Third World regional organizations. ASEAN's success can better be understood through its role in fostering political cooperation and maintaining regional security in Southeast Asia.

Having been in existence for more than two decades, the role of ASEAN has also evolved through the various challenges which it has had to cope, particularly the end of the Cold War and the dynamic economic growth of the region. Against this background, this talk will focus largely on the development of ASEAN as a regional organization and the future challenges that lay ahead.

How to Take Better Photos

by

Alan, Ka Leung Cheng

Department of Chemistry

Abstract

Photography has become one of our most popular and accessible hobbies providing both a very satisfying means of recording and preserving our most memorable experiences and also offering a rewarding means of self-expression. Because of this, it is particularly unfortunate that a feeling has grown amongst casual camera users that whilst it is relatively easy to take snap shots, it is much more difficult and expensive to produce good photography, which is thought to require complex and costly equipment as well as a vast store of technical knowledge.

This is simply not true, and the difference between a snap shot and a good photograph is usually just a little extra thought and care. This is all that is needed to progress from being a casual snap-shotter who is frequently disappointed with his results to a photographer who can be proud of his efforts. It is not even necessary to learn new skills - one only needs to apply the same degree of observation and awareness to take a picture that most people use every day in other areas of their lives and it is surprising how quickly and dramatically the pictures will improve.

Yoga for Health

by

K. Prabhavathi

Department of Chemistry

Abstract

Fundamentally, yoga is a system of practices whose aim is to achieve physical, mental and spiritual discipline. Yoga can be practised to any level you choose, and the spiritual aspects, although important in the overall philosophy of yoga, may play no part if all you want is a slimmer waist or more stamina.

Traditionally, yoga consists of several disciplines and can be practised through different means. The one we call yoga in the west is mainly "HATHA YOGA". In hatha yoga, the approach is slow, smooth and coordinated: body movements flow to rhythmically controlled deep breathing. Deep breathing is nature's tranquilizer and rejuvenator.

Hatha yoga is basically starting to stretch and learning to relax under controlled breathing. So what's so great about it ? Try it and see.

Australia & the Asia - Pacific Basin

by

Nick Thomas

Department of Politics, The University of Tasmania, Australia

Abstract

This paper will trace the development of the Australian state from the turn of the century up to the 1990s. Initially the paper will deal with the domestic politics of the state. Particular attention will be given to the role of political parties as well as Federal-State relations. It will be shown how, despite the decentralist tendencies of the founding fathers, the Federal government is becoming increasingly more dominant. Likely future impacts of these changes will also be discussed.

From here the paper will examine Australia's external affairs. Although some discussion will be devoted to the post-WWII - 1970 period, the main aspect dealt with will be the fundamental changes which have taken place since the Australian Labour Party assumed office in the early 1980s. In particular I will deal with Australia's relations with the Asia-Pacific region.

I will conclude with some observations about the Australian state in the Asia-Pacific region in the 21st century.

Sri Lanka - The Island Nation

by

Pujitha Dissanayake

Department of Civil and Structural Engineering

Abstract

Sri Lanka was referred to as Lanka in the two thousand year old Hindu epic, the Ramayanaya. The early settlers lead by King Vjaya called Sri Lanka as "Thamba-Panni", the Romans knew it as Thaprobane, and the Arab traders called it the Island of Serendib from which was derived the word Serendipity - the faculty of making happy and unexpected discoveries by accident. The Portuguese called it Ceilao, and the Dutch altered this name to Ceylan and the British to Ceylon. After gaining independence from the British, Ceylon was renamed as Sri Lanka. The famous traveler Maco Polo called Sri Lanka the finest island in the world.

Those who have travelled to Sri Lanka know its beauty, for no matter what you want Sri Lanka is likely to have it. From the thousand miles of unspoiled beaches to tropical forests, wild life, spectacular mountains, beautiful waterfalls, archeological sites and villages.

The hardest thing you will find about Sri Lanka is deciding where to visit. This evening's presentation may further enhance your knowledge on Sri Lanka.

Mai Po Nature Reserve: Hong Kong Wildlife's Paradise

by

Simon K.F. Chan

Department of Ecology and Biodiversity

Abstract

In such a crowded place as Hong Kong, it is expected that wildlife watching can only be done on TV. Actually, one can find lots of birds, wildlife and plants nearby in the New Territories. To be more exact, in the Mai Po Nature Reserve, which is the internationally recognized important site of wetland noted as an important passing station for migrant birds. Besides the great variety of birds, a lot of wetland animals and plants also thrive on the Mai Po marsh. The wetland consists of mudflats, mangroves and artificial ponds created by the fishermen. Traditional methods of shrimp and fish cultures are still being practised in Mai Po, though to a lesser extent. Urban development is threatening the integrity of this important but fragile ecosystem. On the other hand, work is being done to preserve this place.

Chloride Cell: Its Role in Osmo-Regulation

by

Chris, K.C. Wong

Department of Zoology

Abstract

Marine teleosts maintain their water balance by drinking, absorbing water and electrolytes in the gut, and eliminating the monovalent ions by the gills. It is believed that gills play an important role in osmo-regulation. Gill is the one of the characteristic features of fish. It comprises various types of cells, including respiratory cells, chloride cells, mucous cells and undifferentiated cells. Chloride cell is a mitochondria-rich cell and contain high content of Na^+, K^+-ATPase. It is believed that it does participate in ions transport. This paper presents an investigation in the cytological changes of the chloride cells during seawater adaptation.

Conceptualization of "Eastern Europe"

by

Czeslaw Tubilewicz

Department of Politics & Public Administration

Abstract

COLD WAR, ARMS RACE, NUCLEAR THREAT, IRON CURTAIN, EMPIRE OF EVIL, COMMUNIST PROPAGANDA, FREE WORLD, DEMOCRACY AND FREEDOM, MOSCOW'S PUPPET STATES, COMMUNIST MENACE, BREZHNEV DOCTRINE, STRATEGY OF CONTAINMENT, NUCLEAR MISSILES DEPLOYMENT, MILITARY MANEUVERS, GULAGS, DOGS OF AMERICAN IMPERIALISM...

How many of these words, expressions, slogans had we to listen to every day before the quiet finale of the Soviet-American confrontation in 1989-1991? How many of us successfully resisted a temptation to view the world in black and white, us-they, free-enslaved, good-bad dichotomy? And how many of us treated the Cold War 'dichotomous visions' as reality?

The geopolitical concept of 'Eastern Europe' belongs to these Cold War visions, or political Fata Morgana. 'Eastern Europe', seen as a homogenous political, economic, social and cultural geographical entity, existed only in our imagination. The region, believed to be homogenous, was in fact profoundly internally divided along the lines of historical, cultural, religious and ethnic differences. With the end of the Cold War, the time has arrived to verify the 'political mirages' created for the purpose of the Cold War propagandists. It is time to visualize the real 'Eastern Europe', without 'ideological' bias or emotional involvement. Maybe the time has also arrived to notice that 'Eastern Europe' ceased to exist and that its resurrection is highly inconceivable.

The Capitalist Stock Markets of Socialist China

by

James W. Quon

LLM student, Faculty of Law

Abstract

In 1984 China commenced its reform of the urban industrial sector under the new policy of socialism with Chinese characteristics. China adopted the model of the socialist market economy. One of the fundamental reforms was the securitisation of the state and collective enterprises. This securitisation changed the system of ownership from ownership of the enterprises by the whole people or the collective to a system under which the enterprises can own their own assets. Originally conceived as an "experiment", the Chinese authorities allowed the establishment of the Shenzhen and Shanghai Stock Exchanges. Demand outstripped supply as many Chinese investors purchased shares on the Chinese capital markets. Then China allowed non-Chinese investors to invest in B shares on the Chinese stock exchanges. In 1993 Chinese enterprises started to list H shares in Hong Kong and N shares in New York. The Chinese capital markets will play an important role to provide the future investment capital to China's businesses and industries in China's long march to become the world's largest economy.

Multi-Lingualism in Singapore

by

Guan Kin Lee

Department of Chinese

Abstract

Singapore is a multilingual country with several major languages and many different dialects. Of the four official languages -- Malay, Chinese, Tamil and English -- Malay has been designated as the national language, although it is the native language of only 15 per cent of the population. On the other hand English, which is a purely western language, has gained superior status in this oriental state, while Chinese, which is supposed to be the mother tongue of the three quarters of the whole population, has been expected to play mainly the role of preserving the Chinese traditional culture. To understand the special linguistic phenomenon of Singapore, this seminar will consider her earlier history to see how the characteristics of an immigrant society and the colonial policy adopted by the British government helped to shape the linguistic mode of Singapore's past and present. Next, the period from the independence to the present time, focusing on the Government's language policies will be examined, followed by an outline of the linguistic profile of Singapore which discusses the functions and the status of the major languages in the country. Finally, some comparisons will be made between Singapore and Hong Kong, in order to show the similarities and the differences between these two islands.

How Does Washback Influence Teaching? Implications for Hong Kong

by

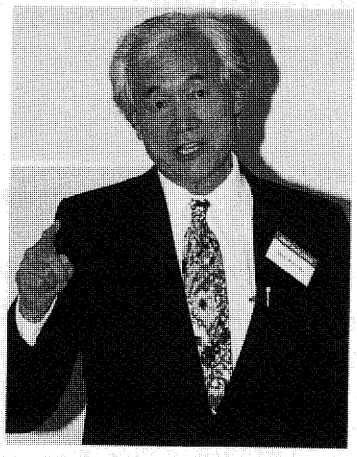
Liying Cheng

Department of Curriculum Studies

Abstract

There is some evidence to suggest that tests have washback effects on teaching and learning (Alderson and Wall, 1993). The extensive use of test scores for various educational and social purposes in society nowadays has made the effect of washback a significant phenomenon. This paper presents preliminary research findings on the washback effect of the Hong Kong Certificate of Education Examination in English in Hong Kong secondary schools by employing various methodological techniques such as questionnaire, interview and classroom observation, which are based on an in-depth case study approach to sample schools in Hong Kong. It further discusses the nature of washback effect, the major teaching and learning factors influenced by it, the different stages of washback effect, and the types of washback effects observed. Preliminary results indicate that washback effect works quickly and efficiently in bringing about changes in teaching materials and slowly and reluctantly and with difficulties in the methodology teachers employ, which is due largely to the commercial characteristics of Hong Kong society. It is suggested that the latter effect may be caused by the constraints imposed upon teaching and teachers in our present schools.

Guest Night Speeches (93-94)



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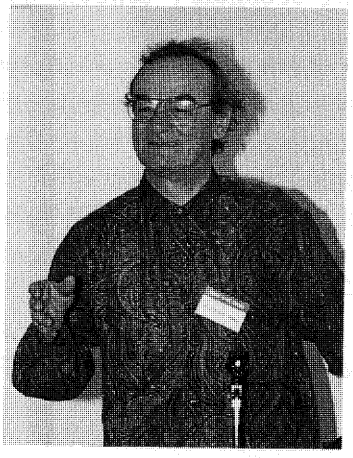

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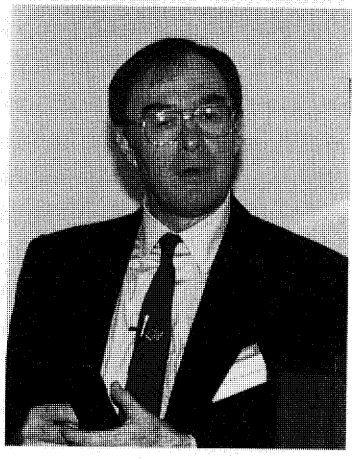

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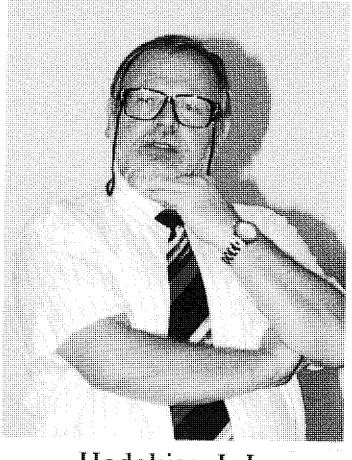
Guest Night Speeches (94-95)



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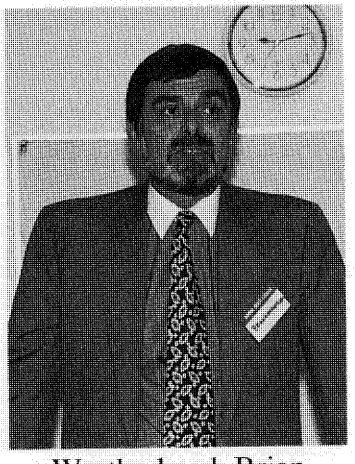

Weatherhead, Brian

College Seminars (93-94)

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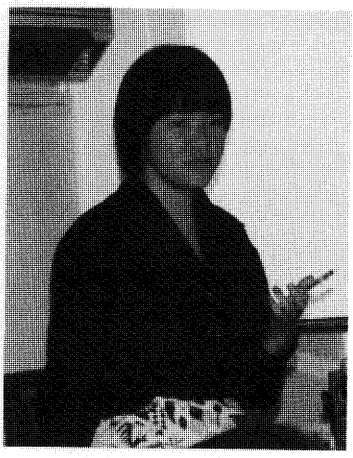

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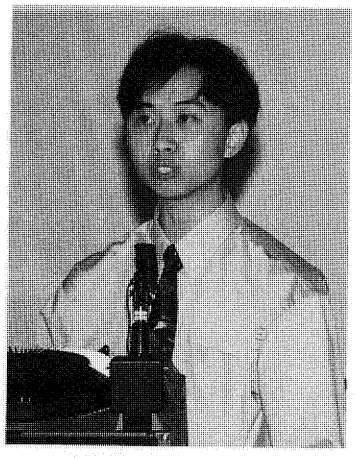

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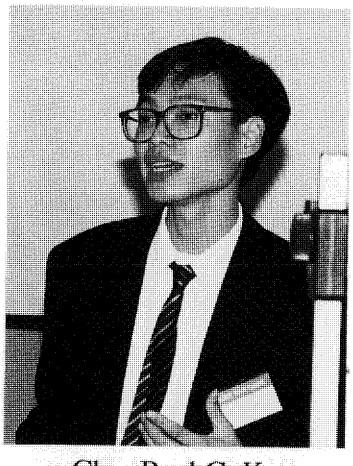

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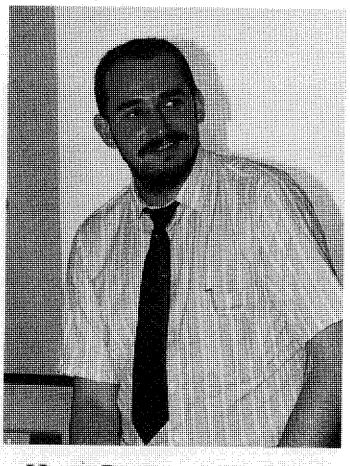

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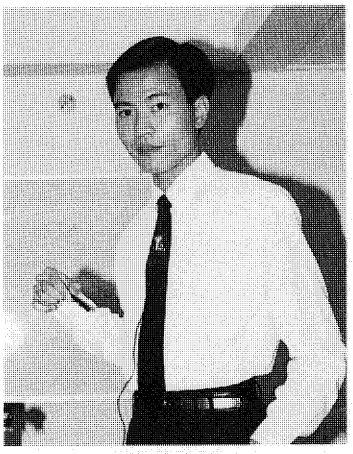

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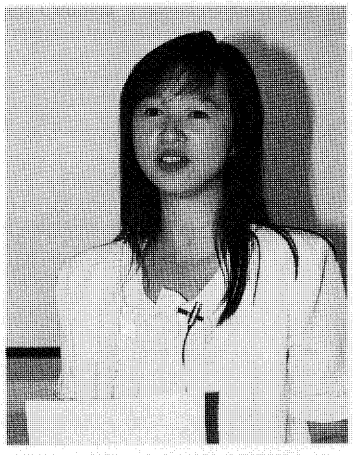

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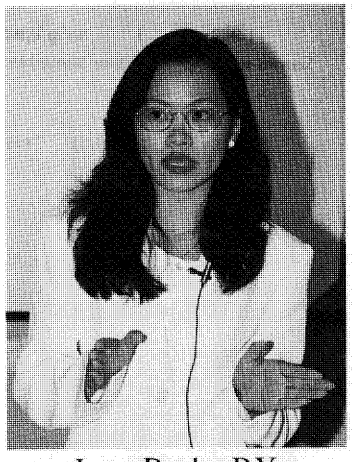

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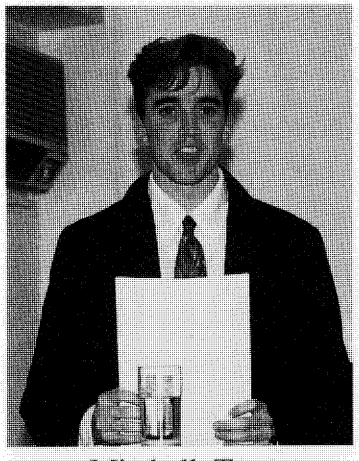

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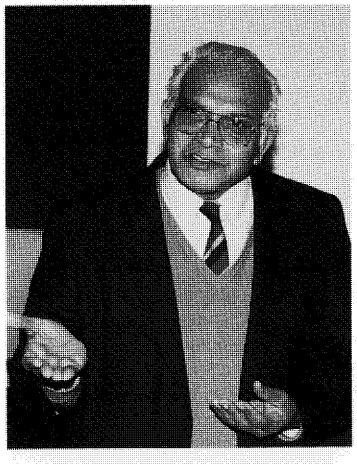

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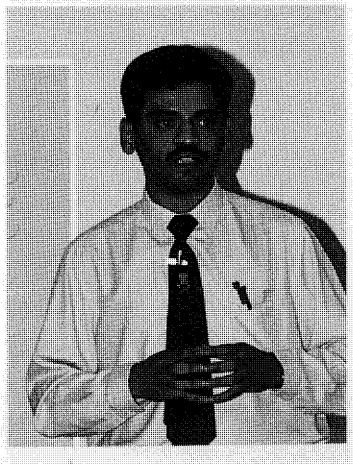

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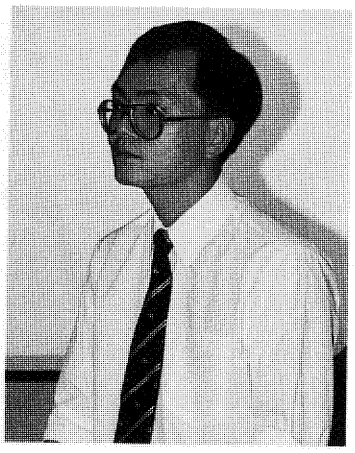

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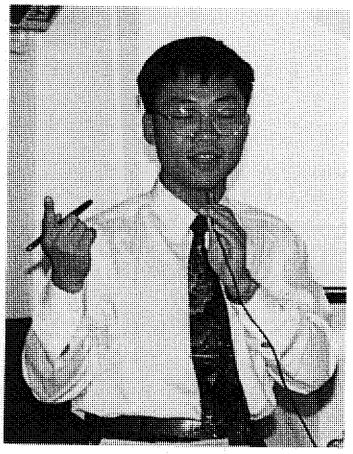

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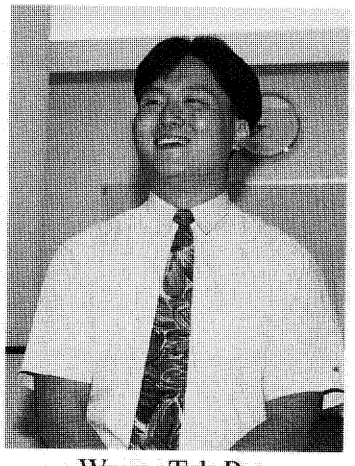

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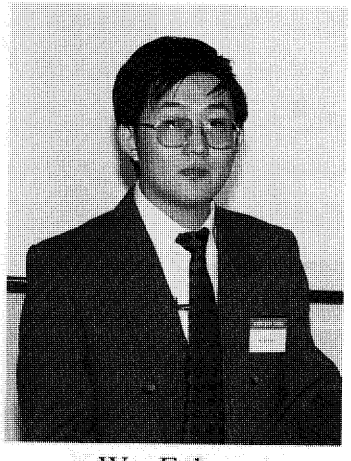

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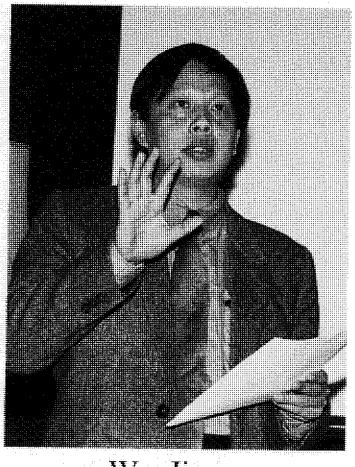

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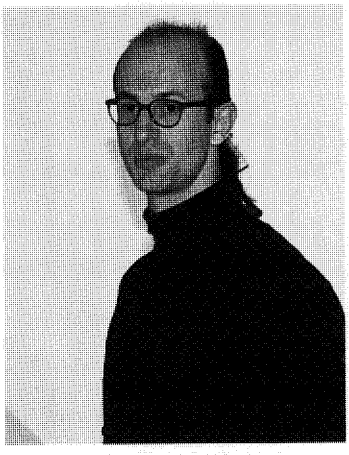

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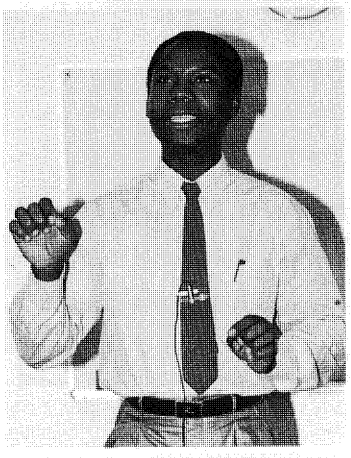

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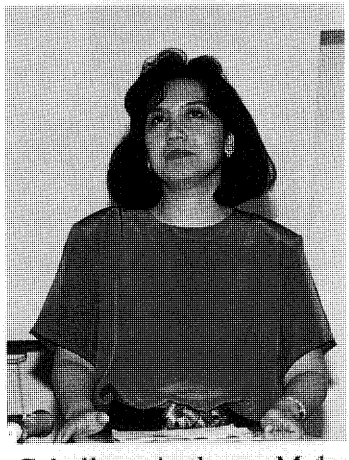

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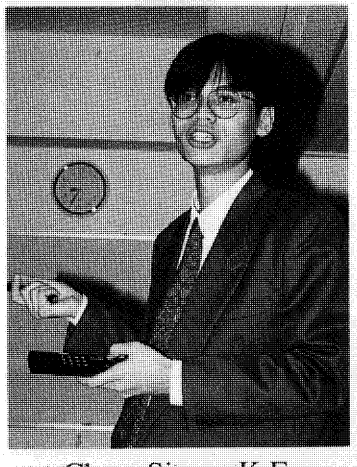

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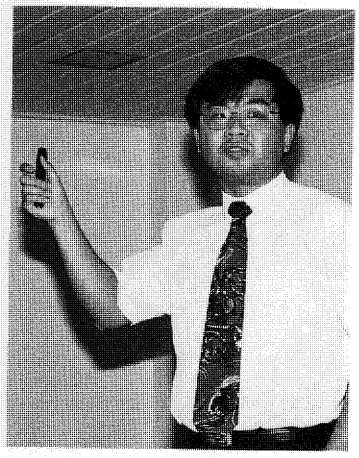

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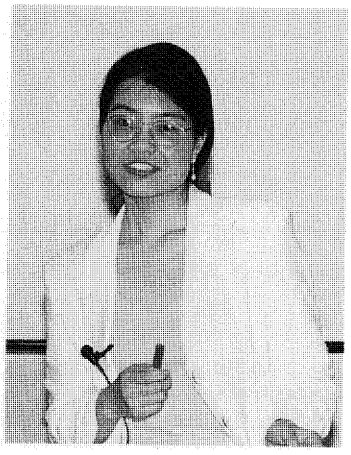

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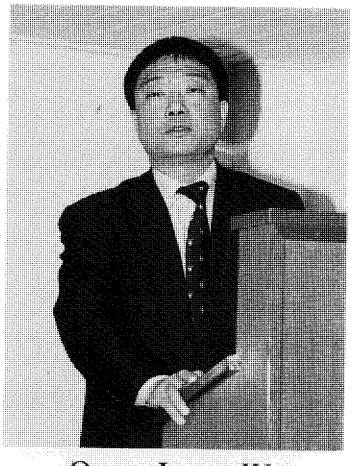

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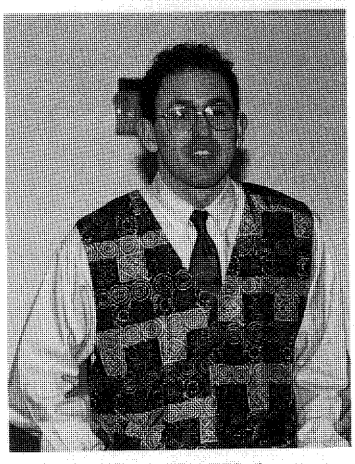

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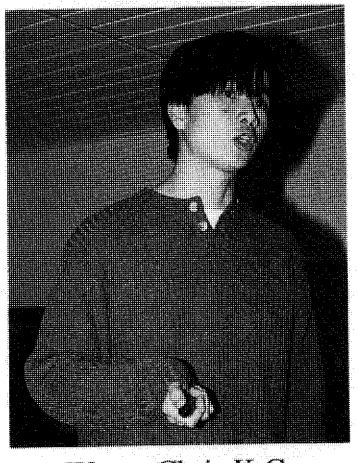

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